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ABSTRACT

Some 134 documents published between 1952 and 1969 are cited in this annotated bibliography on outdoor education. These materials were selected from the total ERIC collection through December of 1969 and are listed with complete abstracts. Documents selected deal with outdoor education, recreation, conservation education, and instructional materials and teaching guides in these areas. A descriptor index at the end of the document is intended to facilitate locating documents pertinent to a specific subject area. Ordering information for the ERIC materials cited is also presented. (DK)

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OUTDOOR EDUCATION

A SELECTED BIBLIOGRAPHY

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EDUCATIONAL RESOURCES INFORMATION CENTER

CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS

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RC004173

FOREWORD

SOURCE OF MATERIALS:

This bibliography was compiled to provide access to some of the latest research findings and developments in outdoor education. Citations and abstracts of documents with ED numbers between 1000 and 2740 are found in the ERIC Catalog of Selected Documents on the Disadvantaged. Abstracts with ED numbers between 2747 and 3960 are found in Office of Education Research Reports, 1956-65. Abstracts with ED numbers above 10,000 appear in Research in Education (RIE), a monthly publication of the U.S. Office of Education since November 1967. Citations and abstracts are included in this bibliography which have appeared in RIE through the December 1969 issue.

A subject index is included at the end of this document as an aid to the user in quickly locating documents pertinent to a specific subject area. The index terms are identical to the descriptors under which documents are indexed in the ERIC system. Each document is indexed under more than one descriptor.

It is anticipated that supplements to this bibliography will be issued in the future.

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OUTDOOR EDUCATION

ED 001 532

MF - $0.25, HC - $1.60

DEMONSTRATION PROGRAM IN REMEDIAL READING AND LANGUAGE ARTS. Action for Boston Community Development, Inc., 18 Tremont Street, Boston, Mass., 1964, 33p.

A summer camp was set up at Agassiz Village, Maine, in 1964, to help develop reading ability for children of Boston public schools. Objectives were to improve each child's reading achievement and related language arts ability. Informal and standardized tests were used to measure results. Physical examinations were given to detect any physical handicaps which might interfere with reading progress. The program served 162 boys of IQs between 75 and 100 from grades 5 through 8. Personnel consisted of 6 specialized instructors and the regular camp staff. Nine diagnostic tests were given to the boys in order to group them for instruction.

Skill areas taught were: phonics, visual memory, sight, vocabulary development, oral reading, dictionary work, analytical reading, skimming, and elaborative thought.

A daily schedule was given showing time allotments for all camp activities. Motivation was considered an important factor to the success of the camp. Teaching techniques employed reinforcement of vocabulary and *inductive*, rather than deductive, methods. A library was provided as well as numerous newspapers, magazines, and other materials. A spoken language program using skits, role-playing, choral reading, musical games, and campfire programs was taught with the reading program. Eight lessons are described for the publishing of a camp newspaper.

ED 001 574

MF - $0.25, HC - $2.55

SUMMARY REPORT -- CAREERS FOR YOUTH -- 1963-64. Careers for Youth, P.O. Box 2326, Phoenix 2, Arizona, 1963, 15p.

CAREERS FOR YOUTH, in Phoenix, Arizona, developed a program to help students fulfill their maximum potential and thus be able to get good jobs. Causes that have kept students and their families from having a better standard of living included lack of motivation, a lack of opportunity to realize free enterprise and a failure of the community to make available to these people equality of opportunity in education and employment. The organization was concerned that the target population should establish worthy goals and retain them.

The staff of two administrators and a secretary was supported by twenty school and twenty non-school people and a board of twenty-two directors. The club members were usually seventh or eighth graders recommended by their teachers and principals.

The program utilized six techniques. Emulation offered the children an opportunity to meet persons who had succeeded in life. Inspiration introduced the children to the world of employment. Participation urged the children to partake of the community's cultural and recreational life. Education provided the needy children with a limited number of textbooks. A CAREER staff member visited the home of a child as a friend; as a friend he could often change the attitudes of parents. Camping offered a ten-day experience that included recreation, arts and crafts, and communication skills; its purpose was to let the children be motivated by exposure to the "better life."

The final attempt of the organization was to encourage the lay and business community's practical and financial support.

ED 001 610 MF - $0.25, HC - $0.55

TARGET PROGRAM 1963-64.
Great Cities School Improvement Program Philadelphia, Pa., 1963, 9p.

The most successful area of the program was reading. The book levels increased for the children; the longer a child was involved with the project, the greater was his rate of progress. In evaluating the role of the Language Laboratory, it was evident that a median increase of slightly more than three reading levels was achieved. Through the creation of the 4-40 Club Program (not described), notable progress occurred in learning the number facts.

In-service programs stimulated the faculty to try new and challenging ways of presenting materials. Teachers felt that because of in-service help, many areas of language arts had improved.

The after-school program was expanded to include an arithmetic group, a homework group, two bell groups, and the glee club.

The school-community coordinator organized a small but active group of Hunter Aids who made many personal contacts with parents. They stimulated parental interest in coming to school and in assisting class trips. Medical services and speech correction service were offered. Though limited, the recreational facilities gave the children a variety of activities in which to participate.

Future plans included a continuation of all extra services, and a renewed emphasis on standards of behavior in school and neighborhood.

ED 001 719 MF - $1.50, HC - $17.65

PHYSICAL EDUCATION FOR BOYS. GRADES 7-12.
Curriculum Bulletin: 1963-64 Series, Board of Education of the City of New York, 1964, 351p.

Teachers in the junior and senior high schools are provided with teaching outlines, teaching devices, and other materials to develop pupils' skills, aptitudes, and proficiency in physical activities and

sports. A graded and sequential development of activities in a unified program, based upon the concept of unit teaching in seasonal activities, is presented. Basketball, baseball and softball, bowling, conditioning and physical fitness, folk and square dance, football and touch football, golf, gymnastics and tumbling, handball, individual and dual sports, recreational games, soccer, social dance, tennis, track and field, and volleyball are discussed. Many of the activities are intended to provide enrichment experiences for the talented and gifted children in these areas. Each area is presented in terms of an introduction, objectives, approach and motivations, instructional material, scope and sequence, class organization, general and specific teaching suggestions, analysis of skills, safety precautions, grade placement of skills, modified and lead-up games, evaluation, and bibliography and references. Drawings, graphs, charts for evaluation and scoring, and floor diagrams are included. Audio-visual aids, model lesson plans, and suggested floor plans are offered in the appendix.

ED 001 891

MF - $0.50, HC - $5.00

OUR SCHOOLS AND RECREATION.
Los Angeles City Schools, Division of Instructional Services, Los Angeles, California, 1963, 98p.

Youth Services is a school-connected recreation program which extends the educational process into the recreational setting. Activities take place after school, on weekends, and on holidays. They include arts and crafts, camping, civic experiences, clubs, music, physical and social activities, special events, and sports. The program serves adults, children, and youth. It provides for: mental, moral, physical, and spiritual development; community, group, and individual participation; varied and wholesome recreation, and civic, patriotic, and social training. Programs are offered at 500 school sites.

The program cooperates with other community agencies to provide a continually expanding recreational program. Qualified personnel from the school system are assigned to positions of leadership. All personnel undergo inservice training.

Each program is described in terms of objectives, characteristics, and activities for each age group. Weekly recreational programs are suggested for elementary and junior high school playgrounds, and for secondary school youth and adults during vacations and after school. A program is also suggested for vacation and weekend recreational camping for junior high youth and adults. The role of recreation services is discussed in reference to the problems of rapid growth in an expanding community.

ED 002 396

MF - $0.25, HC - $2.85

MOTT FOUNDATION PROJECTS. SUMMARY REPORTS JULY 1, 1964 TO JUNE 30, 1965.
Mott Program of the Flint Board of Education, 923 E. Kearsley Street, Flint 3, Michigan, 1965, 55p.

One-page reports are presented summarizing each of the projects in the Mott Program for the Flint Public Schools: workshops and visitations, adult education, graduate training, youth programs, the Mott camp, recreation, a Better Tomorrow for the Urban Child, the Personalized Curriculum Program, medical-dental health, interuniversity clinical preparation, economics, and leadership. A statement of philosophy, staffing and facilities, statistics, and projections for the future accompany each report.

One program reviewed is the Tot Lots. A variety of experiences in various areas are offered four- to eight-year-olds through supervised play. The attempt is made to relate play activities to planned learning experiences: self-expression, cooperation, sharing, self-confidence, and skills in many areas. The Tot Lots are staffed by a full-time director during the summer, 4 assistants, and 122 leaders. Fifty-four children meet in each of 52 elementary schools and primary units.

The philosophical purpose of the Mott Foundation is to increase the strength and character of all members of the Flint community. The effort is being made to improve the education, recreation, physical fitness, children's health, the understanding of basic economics, social services, spiritual values, self-reliance and useful living.

ED 002 453

MF - $0.25, HC - $1.30

APPALACHIAN VOLUNTEERS.
Appalachian Volunteers, Kentucky, 1964, 24p.

College student volunteers working in the isolated areas of Eastern Kentucky have instituted a program designed to aid in the war on poverty. The Appalachian Volunteers were initially supported by a grant from the Area Redevelopment Administration and by contributions, from private corporations and foundations, of money and materials. Groundwork has been laid for volunteer programs in education, health, recreation, and welfare for adults as well as children. A primary goal was to involve local citizens in self-help.

Membership in the Volunteers is open to all students of all educational institutions, and high school students within the community are thus able to be directly involved. Adult participation includes physical labor, the preparation of meals, and the provision of shelter for the student volunteers.

The remote, dilapidated, one and two room schools of the area are physically renovated and transformed into community centers. An enrichment program includes programs in reading, arithmetic, and communication; the preparation of special materials designed to develop skills; and provision for a tutoring service. Health and recreation programs, including

provisions for hot lunches and improvement of existing water supplies, are developed. Classes in literacy, domestic skills, health, and sanitation improvement are set up for adults of the community.

ED 002 494 MF - $0.25, HC - $0.80

RECREATION PROBLEMS OF RURAL YOUTH IN A CHANGING ENVIRONMENT.
Prendergast, Joseph, National Committee for Children and Youth, 1145 19th St., N.W., Washington, D.C. 20036; National Recreation Association, Washington, D.C., 1963, 14p.

Rural youth who are moving to urban areas are not prepared to participate in urban types of recreation programs. The recreation skills of those who have left the farm but are still in rural settings do not match the urban opportunities reaching out to them. Those still on the farms are getting recreation ideas through mass media without finding local opportunities of expressing them.

Much is being accomplished in some rural communities through private and public recreation agencies, but more needs to be done. Counties are an important factor in rural recreation because in many cases they are the only units with enough people and tax resources to provide a variety of recreational services. However, many counties trying to help rural youth have serious fiscal and administrative problems. States are not playing the important role they should. The Federal government has begun to provide leadership, counsel, and financial aid. In 1963 the Recreation Advisory Council endorsed the creation of a system of national recreation areas and set selection criteria. A Land and Water Conservation Fund Bill promotes outdoor recreation opportunities. A Federal Land Policy permits State and local governments to lease new parks or recreation areas from the Federal government. The Housing Act of 1961 promotes the acquisition of permanent open space land for park and recreation purposes. The Bureau of Outdoor Recreation coordinates Federal outdoor recreation activities. The Department of Agriculture, in trying to create new economic opportunity and to update wasteful and outmoded patterns of farm use in rural America, is giving an important role to recreational facilities.

Recommendations are made for local studies to determine status of and need for recreation in the rural community; for pilot projects to show what can be done with rural resources; and for the cooperation of private enterprise and all levels of government to provide more recreational land, services, and leadership for rural youth.

ED 002 610 MF - $0.25, HC - $0.35

COLORADO MIGRANT MINISTRY ANNUAL REPORT 1961.
5p.

Migrants were aided by the Colorado Migrant Ministry, which worked with public school officials and health and welfare agency personnel, helping to determine legislative needs, and providing direct services to migrants in three areas of Colorado.

In Rocky Ford, a Spanish-speaking educated husband-wife-daughter team worked with various groups who led activities, stories, crafts, swim trips, remedial reading, games, sports, instrumental music instruction, singing, and household skills.

In Fort Lupton, a staff of seven organized: a children's program to develop motor and social skills; an informal teen-age club group which did its own planning and financing; a motor mechanics class; a religious concerns program that utilized the services of a Spanish-speaking seminary student; a home economics course in meal preparation, nutrition, and sewing; and adult programs.

In Palisade, a staff of eight organized a children's program stressing moral values with play activities, a boys' club and a girls' club, a large play house, a park program of recreation, a teen recreation program, a vocational education program, a woodworking group, adult programs, and child care programs.

ED 002 929 MF - $0.75, HC - $6.85

LEISURE-TIME ACTIVITY-INTERESTS OF TEENAGE YOUTH
IN THE WASHINGTON METROPOLITAN AREA.
Hoffsommer, Harold, and Others, Maryland University,
College Park, Maryland, 135p.

The leisure activities of youth were inventoried in an effort to determine how goals and values were formed and choices made regarding leisure activities. The objectives were to assemble data concerning leisure activities of youth and to ascertain activities and interests. A brief questionnaire on leisure activities was administered to nearly all students in grades 8 through 12. Each youth was asked to fill out a one-page data sheet calling for information on area residence, age, sex, grade level, cultural level of parents, education plans, use of car, spending money available per week, social participation, and school standing. From these data, basic tabulations were made for about 27 types of areas based upon socioeconomic status, degree of urbanization, and adequacy of leisure-time facilities. The findings were validated by a post-study interview of 300 of the youths. The descriptive analysis of recreational activity-interests in teenagers has indicated that sex, age, place of residence, socioeconomic status, and residential density all contribute to the variation in the relative frequency of a typology of youth. No evaluations of any type of youth--outdoor, intellectual, passive, dating, or altruistic--according to desirability have been made, nor does the author intend that any such evaluation be inferred at this stage of the research. Basic tables for this study are in Part 2, ED 002 930. (JL)

ED 002 930 MF - $1.25, HC - $14.40

BASIC TABLES FOR THE STUDY OF LEISURE-TIME ACTIVITY TYPES IN SEVENTY-THREE THOUSAND TEENAGE YOUTH IN THE WASHINGTON METROPOLITAN REGION AND IN FLINT, MICHIGAN.
Hoffsommer, Harold, and Others, Maryland University, College Park, Maryland, 286p.

This is part 2 of a project which studied leisure-time activity-interests of high school students. The main interest of the study was to produce scientific data and particularly such data as may be of service to schools, planners, those interested in leisure-time activities, and social workers. These tables report in percentage form incidences of a full spectrum of recreational activities garnered from a pretest of 8,000 cases studied through the use of matrices of 40,000 tetrachoric correlations and the analysis of write-ins to open-ended questions. Each activity used was mentioned at least once in these pretest cases. For the first 77 activities a report was made of the percentage engaging in the activity a specified number of times. Below this was reported the percent "wanting to" do the activity "if nothing prevented you." The third line reported a "Like-Do" ratio intended to measure the degree of appetition for an activity. Ratios above 1.00 indicated an appetition for an activity, ratios below indicated a "dis-appetition." The symbol "D" in the Like-Do ratio row means that the percent of persons doing the activity and the percent of persons wanting to do the activity more often were both zero. The symbol "A" in the Like-Do ratio row signified appetition for an activity in which the percent of persons who indicated that the activity was done is zero. Ratios above 1.00 signified appetite for an activity--"to do it more often or to try it out." A related document is ED 002 929. (JL)

ED 011 212 MF - $0.50, HC - $4.45

CURRICULUM GUIDE IN CONSERVATION EDUCATION.
Herrington, Eugene H., and Robbins, Larry, Colorado State Department of Education, Denver; Colorado State Department of Game, Fish and Parks, Denver, 1964, 87p.

This curriculum guide presents conservation of natural resources as an integrated natural science study. Natural resources are seen as being inorganic (minerals, air, water, and soil) or organic (plant, animal, and human). These resources are presented as suggested classroom activities designed for the primary, intermediate, and junior high students. Vocabulary lists and bibliographies of books, pamphlets, films, filmstrips, and other aids are included. (FS)

ED 011 426 MF - $0.25, HC - $1.05

A SELECTED BIBLIOGRAPHY FOR PROGRAMING PHYSICAL EDUCATION AND RECREATIONAL ACTIVITIES FOR THE MENTALLY RETARDED.
National Education Assn., Washington, D.C., 19p.

Containing 93 annotated references to books, pamphlets, and journal articles from 1937 through 1966, this bibliography is designed for teachers, recreation personnel, parents, and counselors. Listings include a section of references on recreational activities and physical education for the mentally handicapped, as well as a section on the general subjects of mental retardation, physical education, and recreation. (MY)

ED 011 716 MF - $0.50, HC - $3.65

GUIDE FOR TRAINING RECREATION LEADERS IN CONSTRUCTIVE AND CREATIVE RECREATION ACTIVITIES FOR THE MENTALLY RETARDED, IN-SERVICE TRAINING MANUAL.
Hatch, Modesta, and Others, Rainier State School, Buckley, Washington, 71p.

Developed as a guide for recreation leaders and volunteers working with the mentally handicapped, this booklet presents guidelines and specific activities for physical conditioning and social-recreational activities. Recreational theories and their application to the mentally handicapped are presented. Directions are given for physical exercises, ball and bean bag games, musical and singing games, and fingerplays. The bibliography contains over 66 items. (MY)

ED 011 807 MF - $0.25, HC - $0.50

OUTDOOR EDUCATION--A METHOD OF TEACHING.
Isenberg, Robert M., 1967, 8p.

Outdoor learning is defined in this article as a method of learning which explores the advantages of a child's involvement with nature. High motivation, sound enrichment, and personal and social development are seen as outcomes of an outdoor education program. Outdoor resources can be utilized in any course at any grade level in any school. A condensation of this article, entitled "Education Comes Alive Outdoors," was published in the "NEA Journal," April 1967. (SF)

ED 012 115 MF - $0.50, HC - $3.35

DAY CAMPING FOR THE MENTALLY RETARDED.
Ginglend, David, and Gould, Kay, National Assn. for Retarded Children, 1962, 65p. Also available from The American Camping Association, Bradford Woods, Martinsville, Indiana, for $0.25.

Emphasis is placed on mental health, physical development and coordination (both motor and muscular), social adjustment, and language and intellectual development. Sections are devoted to organization of a day camping program, selecting the staff and the campers, the day camp in operation, day camping as a training period, camp relations with the home and the community, and evaluation. Included are samples of a camp budget, staff responsibilities, communications to parents, and application and progress report forms. An 18-item bibliography is included. (JZ)

ED 012 250 MF - $0.25, HC - $1.10

NATURE CENTERS AND OUTDOOR EDUCATION FACILITIES.
National Audubon Society, New York, N.Y., 1967, 20p. Also available from The National Audubon Society, 1130 Fifth Avenue, New York, New York 10028, for $1.00.

A partial list of nature centers and outdoor education facilities in the United States is included in this directory. An introductory section describes the general nature of the facilities included in typical centers. Types of centers include museums, nature sanctuaries, arboretums, camps, and laboratories. Items are listed alphabetically by state and usually include--(1) the name, address, and phone number of the sponsoring organization, (2) the group or groups for which the center is best suited, (3) unusual or outstanding features, and (4) the length of the operating season. (AG)

ED 013 007 NOT AVAILABLE FROM EDRS

DIRECTORY OF CAMPS FOR THE HANDICAPPED.
National Society for Crippled Children and Adults, Chicago, 1967. Available from National Society for Crippled Children and Adults, Inc., 2023 West Ogden Avenue, Chicago, Ill. 60612 ($1.00).

One hundred and seventy-seven resident camps in the United States and Canada and 77 day camps in the United States which serve children or adults with physical, mental, social, and emotional handicaps are listed alphabetically by state. For each camp, information on types of the handicapped who are accepted, specific exclusions, age range, number and length of sessions, capacity, fee,

camperships available, and name and address of sponsor are given. Each section (resident and day camps) is indexed alphabetically by camp name and by type of impairment. Any camp that has received accreditation by the American Camping Association or that is in some degree supported by the Easter Seal Society is so indicated. (RS)

ED 013 141 MF - $0.25, HC - $1.80

PROVIDING ENRICHMENT OPPORTUNITIES THROUGH CAMPING, AND OTHER SIMILAR ACTIVITIES (ELEMENTARY), SPRING 1966. PROGRAM EVALUATION.
Milwaukee Public Schools, Wis., 1966, 34p.

Outdoor education in the form of day camps, tepee camps, three-day camps, teacher-selected field trips, and a mobile nature museum was provided for children from deprived areas. A total of 11,680 children from 44 elementary, junior high, and high schools participated in the program between May 1, 1966 and August 3, 1966. The day and over-night camping experiences took place at established camp facilities in wooded areas. Field trips were conducted to dairy farms, state forests, a zoo, and a conservatory. The mobile nature museum was a mobile trailer containing displays which were described to the students by a qualified naturalist. Questionnaires distributed to students, teachers, staff members, parents, administrators, and a school psychologist led to the conclusions that (1) this was a particularly valuable experience since such facilties were not generally available to the poverty area children, and (2) objectives concerned with the development of social-democratic living habits, new recreational and vocational opportunities, and interest and understanding in the outdoor environment were well met. Appendices present sample questionnaires and data summaries. (SF)

ED 013 532 MF - $0.25, HC - $2.20

SCHOOL SITE ANALYSIS AND DEVELOPMENT.
California State Dept. of Education,
Sacramento, 1966, 42p.

This study represents a search for a system of determining the amount of land required to conduct the educational programs offered by the California public schools. Data are contained in tables that provide a basis of determining the site size for a school that is being designed to serve a specific enrollment size and grade level range. The site factors included were--(1) land for outdoor physical education, (2) developed building site, (3) parking and access roads, (4) percent factor for layout. Site requirement categories included were--(1) small schools (fewer than 7 classrooms), (2) elementary grades, (3) grades 7 through 9, (4) grades 9 through 12. Supporting these data are diagrams of space modules representing the various facility layouts. Module combination depends on the various enrollment sizes given. To facilitate this analysis, a brief sequential site plan development procedure and list of essential site survey data are included. (MH)

ED 013 758 NOT AVAILABLE FROM EDRS

INLAND BIOLOGICAL FIELD STATIONS OF THE UNITED STATES.
Arvey, M. Dale, and Riemer, William J., American Institute of Biological Sciences, 1966. Journal citation: BIOSCIENCE, April 1966.

Information about 42 inland biology field stations in the United States is presented. Data were obtained through visits by representatives of the National Science Foundation. In an introductory section the characteristics, functions, and problems generally associated with field stations are reviewed. Individual stations are listed alphabetically, by state. Résumés include (1) name, (2) address, (3) acreage, (4) types of ecological areas represented, (5) nature of the program offered, (6) unique facilities or features, and (7) operating season. The résumés are keyed to a map of the United States. (AG)

ED 014 434 MF - $1.25, HC - $14.85

CONVERSATION-MATERIALS CONSERVATION. A SURVEY OF PRINTED MATERIALS FOR CONSERVATION EDUCATION.
Johnson, Carl S., and Dambach, Charles A., Ohio State University, Columbus, Research Foundation, 1966, 295p.

Free and inexpensive materials for use in conservation education were evaluated. The objectives of the project were to determine (1) the kinds of free and inexpensive conservation materials which may be needed, (2) the kinds that are being produced, (3) the quantity produced, and (4) the aggregate expenditures for production. Efforts were made to analyze the characteristics of extant materials, determine teacher awareness of conservation materials and recommend to the producers of materials ways of increasing the efficiency of their efforts. Materials for analysis were randomly selected from 7,524 titles received. Three sets of judges--educators, conservationists, and classroom teachers--evaluated the 1,541 pieces in the sample. A stratified random sample comprising about three per cent of the teachers in Minnesota, Missouri, and Ohio was used in determining teacher awareness of conservation materials. Both national-level materials and state-level materials for each of the tested states were used in the assessment. The data resulted in 60 conclusions about the materials including such areas as (1) quantity of extant materials, (2) producers of materials, (3) target groups for materials, (4) readability, (5) topics covered, (6) cost of production, (7) teacher awareness, and (8) suggested improvements for producers. A complete list of the producers of materials used in the project is appended. (DS)

ED 014 436 MF - $0.25, HC - $2.95

THE 1967 SUMMER SCIENCE PROJECT AT UNIVERSITY SCHOOL.
Ingersoll, Jonathan E., and Others, Cleveland Public Schools, Ohio, University School, Shaker Heights, Ohio, Natural Science Museum, Cleveland, Ohio, 1967, 57p.

Described is a six-week summer science project designed to--(1) provide talented teachers and promising students from diverse social, economic, and educational backgrounds with the opportunity to teach and learn together in circumstances conducive to creative endeavor and mutual understanding, (2) contribute to the development of educational programing in the natural sciences, (3) maintain and extend the cooperative endeavors of Cleveland's major cultural and educational resources, and (4) introduce urban and suburban boys to the natural earth. The project involved 72 junior high school boys from 21 Cleveland urban schools, 10 suburban schools, and two independent schools. Local teachers and personnel from the Cleveland Natural Science Museum, Ohio University, and other community agencies were involved in conducting the project. A project rationale and description are provided. The description is divided into the six weeks covered and includes for each week--(1) topic covered, (2) classroom and field activities, and (3) resources which include references, films, equipment, and personnel. Numerous pictures of student involvement are included. (DS)

ED 014 845 MF - $0.25, HC - $2.50

A GUIDE FOR PLANNING PHYSICAL EDUCATION AND ATHLETIC FACILITIES.
New Jersey State Dept. of Education, Trenton, 1964, 48p.

This study examines physical education facilities, their physical needs, and related design considerations. A system of determining the total number of teaching stations needed is given to aid initial requirement analysis. Indoor facilities analyzed include--(1) the gymnasium, in terms of location, size, design features, and related components, (2) auxiliary teaching rooms which provide teaching stations for specialized functions, (3) locker and shower rooms including supporting facilities and details, and (4) offices for supervisory functions. Planning factors for outdoor facilities include location, supervisory control, safety, utility, surfacing requirements, and specialized equipment. Requirements for inter-scholastic athletics and recreational facilities are listed in terms of storage and usage requirements, while important general factors for field house and athletic field design are given. A checklist for facilities planning is included to help eliminate common errors made in design and construction. (MH)

ED 014 848 NOT AVAILABLE FROM EDRS

PLANNING AREAS AND FACILITIES FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION BY PARTICIPANTS IN NATIONAL FACILITIES CONFERENCE. REVISED 1965.
Athletic Institute, Chicago, Ill., American Assn. for Health, P.E. and Recreation, 1965. Available from The Athletic Institute, Merchandise Mart, Chicago, Ill. 60654, or from American Association for Health, Physical Education and Recreation, 1201 18th Street, N.W., Washington, D.C. 20036.

Specific information is provided in this guide to planners of areas and facilities for athletics, recreation, outdoor education, and physical and health education. Part one concerns basic concepts pertinent to the area of consideration. The aims of physical education, health and safety education, and recreation are listed. Planning principles, planning units, and area types are discussed. Part two deals with outdoor areas and facilities. Planning techniques are outlined. Specific guidelines for developing recreation, park, school, outdoor, and outdoor education areas are given. Part three is concerned with indoor facilities. The discussion is broken into elementary and secondary schools, colleges and universities, recreation buildings, and general building features. Part four pertains to aquatic areas and facilities. Design and construction of swimming pools are considered from a technical viewpoint. Development of waterfronts and beaches is also discussed. Part five deals with health and safety areas and facilities. Facility needs related to the school health program in the light of the school's place in the community are discussed in one chapter and safety education areas dealing with driver education are discussed in the other. Throughout this guide, specific information is given to guide the reader. Several appendices include information about the National Conference on Areas and Facilities for Health, Physical Education, and Recreation; specific diagrams of various types of athletic courts; rules sources; requirements of the aging and disabled; checklists for planners; and a glossary. (RH)

ED 015 059 MF - $0.25, HC - $0.20

RECREATIONAL AND CULTURAL OPPORTUNITIES.
Beldon, Rena, 1967, 2p.

Recreational and cultural opportunities for most rural youth are centered around schools, but with increasing emphasis on academic subjects the students are being deprived of opportunities to participate in certain activities for enjoyment only. Suggestions include taking the performing arts to the rural areas, planning art festivals that would include plays, concerts, and art shows, and developing recreation centers at the schools, with staffs to coordinate programs and provide instruction. The most important need is leaders who have the enthusiasm

to build a desire in youth to be participants instead of spectators. This speech was presented at the National Outlook Conference on Rural Youth, October 23-26, 1967, Washington, D.C., sponsored jointly by the U.S. Departments of Agriculture, Health, Education and Welfare, Interior, and Labor, OEO, and the President's Council on Youth Opportunity. (SF)

ED 015 070 MF - $0.25, HC - $0.55

RECREATIONAL AND CULTURAL OPPORTUNITIES AVAILABLE TO RURAL YOUTH.
Brown, Minnie M., 1967, 9p.

While organized recreational and cultural opportunities are available for rural youth in North Carolina, the amount of participation by this group is quite limited. Some of these opportunities are provided through the efforts of 4-H, since a primary objective of this organization is the development of recreational and cultural participation. To augment the efforts of organizations providing recreational and cultural opportunities, the North Carolina Recreation Commission provides the following free services--(1) studying and appraising recreation interests, (2) cooperating in the promotion and organization of local recreation systems, (3) planning and financial advice, and (4) training programs for recreational personnel and for the establishment of approved recreation standards. To utilize fully the established recreational and cultural opportunities, two major needs will have to be satisfied--(1) a greater awareness of the existing resources on the part of all concerned, and (2) the motivation of youth, parents, and leaders as to the value of participation in recreational and cultural activities. This speech was presented at the National Outlook Conference on Rural Youth, October 23-26, 1967, Washington, D.C., sponsored jointly by the U.S. Departments of Agriculture, Health, Education and Welfare, Interior, and Labor, OEO, and the President's Council on Youth Opportunity. (ES)

ED 015 071 MF - $0.25, HC - $0.20

RECREATION AND CULTURAL OPPORTUNITIES.
Harvey, Ellen E., 1967, 2p.

Recreational activities and opportunities seem to be closely involved with the Federal government, both in financial support and in the actual opportunities possible. Consequently, the time is ripe for the origin and/or development of one or more new agencies with the interests and needs of modern youth as the lever for their beginning. To accomplish this task, it will be necessary to utilize the democratic process which would necessarily involve the youth of the nation. Through these efforts, it might be possible to return to the small neighborhood center where youth not only has opportunity, but responsibility. This speech was presented at the National Outlook Conference on Rural Youth, October 23-26, 1967,

Washington, D.C., sponsored jointly by the U.S. Departments of Agriculture, Health, Education and Welfare, Interior, and Labor, OEO, and the President's Council on Youth Opportunity. (ES)

ED 015 126 NOT AVAILABLE FROM EDRS

PLANNING A NATURE CENTER.
Ashbaugh, Byron L., National Audubon Society, New York, N.Y., 1966. Available for $2.00 from the National Audubon Society, 1130 Fifth Avenue, New York, N.Y. 10028.

This bulletin is produced by the Nature Centers Division, National Audubon Society to provide professional guidance and technical know-how in the development of community nature and conservation centers. The topics covered are--(1) purpose and value of a nature and conservation center, (2) initial considerations such as community readiness, land availability, and type of nature centers, (3) organizing for action including suggestions for committee formation, (4) appraising the community's resources, (5) planning the program including topics covered, by grade level, submitted by centers already in operation, (6) site and building planning with diagramed layouts and plans, (7) planning educational facilities such as trail planning and outdoor demonstrations and displays, (8) staffing, budget, and fund raising, and (9) operational suggestions for after the center is open. Appended are--(1) a sample constitution and bylaws for a nature center, (2) sample articles of incorporation, (3) the service offered by the Nature Centers Division of the National Audubon Society, (4) names and addresses of nature centers and demonstration farm operated by National Audubon Society, (5) sources of materials and assistance, and (6) suggestions for making trail markers and other signs. (DS)

ED 015 321 MF - $0.50, HC - $3.65

OAK GLEN, A TRAINING CAMP FOR UNEMPLOYED YOUTH.
Chapman, Jane R., Office of Manpower Policy, Evaluation and Research (Department of Labor), 1966, 71p. Also available from Manpower Administration, Office of Manpower, Policy, Evaluation, and Research,U.S. Department of Labor, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20210.

A training camp for unemployed youth near Riverside, California, is described in this summary of a detailed report, "An Evaluation of the Concept of Trainee Camps for Unemployed Youth," prepared by the Stanford Research Institute (SRI). Youth between 16 and 21 years of age, not in school, and with little chance of employment because of lack of skills, knowledge, or abilities participated in the program. The objectives of the SRI study were to determine (1) the proportion of trainees who found employment or enrolled in further training,

(2) the extent to which trainees who entered the program but terminated before completing may have benefited from their experience, (3) factors in the camp experiences which benefited the trainees, and (4) the characteristics of the trainees. Data, chiefly from camp files, were obtained on 77 current trainees, 113 graduates, 207 trainees who terminated prior to the completion of the program, and 82 who were accepted but did not attend. The rate of termination of trainees before graduation was 60 percent. Almost 70 percent of the graduates were employed, compared with approximately 55 percent of the terminees. Factors which seemed to benefit trainees were (1) receiving praise, rewards, and individual attention, (2) improving physical condition through training and diet, (3) increasing reading and math proficiency, and (4) in some cases, learning to work under discipline and regimentation. An annotated bibliography is provided. (PS)

ED 015 398 MF - $0.50, HC - $5.05

TRAINING FOR NEW TRENDS IN CLUBS AND CENTERS FOR OLDER PERSONS, PROCEEDINGS OF A SEMINAR (ITHACA COLLEGE, ITHACA, NEW YORK, June 23-25, 1966).
Rabe, Henrietta F., New York State Education Dept., Albany, 1966, 91p.

This advanced training seminar was designed for staff members of senior citizen programs throughout New York State. Position papers were presented on the social future of the aging and on effective means of serving the individual. Workshop discussions were held on ways to achieve a new social role for the elderly, the group method in clubs and centers, and individual needs. Program skills demonstrations dealt with uses of folk and square dancing, music activities, physical fitness activities, puppetry, and book and discussion groups for senior citizens. Recent significant developments were reviewed--a primary school "substitute grandparent" program in White Plains, the training of volunteers to visit shut-ins, proposed county-wide and neighborhood programs of service to the aged, teacher training for "den mothers," special health services by the New York City Department of Public Welfare, and the Fourscore Club in Cortland. A panel also discussed mental and physical health, new goals for social action, more effective use of older persons as volunteers, limited paid employment for older persons, and program development. (The document includes seminar implications and an appendix.) (LY)

ED 015 583 MF - $0.25, HC - $2.05

BIBLIOGRAPHY ON RESEARCH IN PSYCHOMOTOR FUNCTION, PHYSICAL EDUCATION, AND RECREATION FOR THE MENTALLY RETARDED.
American Assn. for Health, P.E. and Recreation, 1966, 39p.

This alphabetized bibliography lists 490 articles, reports, unpublished works, and papers concerning recreation, physical education, and

psychomotor functions. The bibliography's citations are relevant to the educable, trainable, severely, and profoundly mentally handicapped, the brain damaged, and those with neuropathological conditions. (JA)

ED 015 594 NOT AVAILABLE FROM EDRS

ADAPTED PHYSICAL EDUCATION, PRINCIPLES AND PRACTICE OF PHYSICAL EDUCATION FOR EXCEPTIONAL STUDENTS, SECOND EDITION.
Daniels, Arthur S., and Davies, Evelyn A., 1965.
Available for $8.50 from Harper and Row, Publishers, 49 East 33rd Street, New York, N.Y. 10016.

This book has three purposes--(1) to show how physical education activities may be adapted for exceptional students at all levels of school, (2) to serve as a practical guide to physical education personnel who wish to work for full development of each student, and (3) to serve as a text for students in training, teachers, and therapists. Part one defines the problem in terms of children to be served, society's changing attitudes toward those with disability, and adjustment problems. It also reviews anatomy, kinesiology, and physiology of exercise. Part two considers physical education in relation to children with specific disabilities such as amputations, heart conditions, cerebral palsy, epilepsy, poliomyelitis, visual and auditory handicaps, and special health conditions. Programs for children with emotional instability, behavior problems, or mental retardation are discussed briefly. Part three considers a number of administrative-organizational topics and the values of aquatics and camping. A final chapter examines several questions related to life after the school program is completed. Selected bibliographies follow each chapter. (DF)

ED 015 871 NOT AVAILABLE FROM EDRS

GUIDELINES TO CONSERVATION EDUCATION ACTION.
National Audubon Society, New York, N.Y., 1966.
Available for $2.50 from the National Audubon Society, Nature Centers Division, 1130 Fifth Avenue, New York, N.Y. 10028.

This manual focuses on methods by which state divisions and local chapters of the Izaak Walton League and similar organizations can be effective in educating themselves and their communities. It makes specific suggestions for group and individual action. It does not deal, in general, with professional training but with enlisting the participation of a well-informed laity in the development and application of sound conservation policies, programs, and practices. Some topics discussed are (1) the history of the conservation movement, (2) the problems and resultant need for conservation education,

(3) the clarification of a basis for conservation education, (4) the changing of public attitudes, (5) the transformation of conservation needs into constructive action, (6) the areas of greatest need in conservation education, and (7) suggested conservation education projects for state and local groups and individuals. Appended are--(1) guidelines, sample constitution, and bylaws for a state conservation education council, (2) sample articles of incorporation, (3) statements on the role of a state education conservation coordinator, (4) recommendations on establishing a nature education center, (5) a description of the junior program, (6) a partial list of nongovernmental organizations interested in conservation, and (7) recommended reference books and reading. (DS)

ED 015 990 MF - $0.50, HC - $3.15

A JUNIOR HIGH SCHOOL ORIENTATION CAMP, A COORDINATED CAMPING EXPERIENCE.
Neale, Daniel, and Others, Hennepin County Community Health and Welfare Council, 1966, 61p.

A 2-week summer camping program was offered to 61 disadvantaged students about to enter Lincoln Junior High in Minneapolis, Minnesota. The program's primary purpose was to ease the student's transition into junior high school. Through camping activities and school orientation classes conducted by the Lincoln staff, campers would become acquainted in advance with prospective classmates, school personnel, and school procedures. The result would be a more favorable attitude toward junior high school. To measure the fulfillment of program objectives, project personnel established a control group of noncampers. At the end of the camp program, questionnaires, a sentence completion test, and a school-related information test were administered to both groups, and individual interviews were held with campers, parents, and staff members. Almost all of those interviewed were extremely positive about the camp. Parents reported that their children had matured socially and were better informed about their new school. The information test scores also indicated that the campers were more knowledgeable about school procedures and personnel than were the noncampers. However, the measures of attitude revealed little difference between campers and controls except that on the first day of school campers were not looking forward to the junior high school experience as much as the controls. (LB)

ED 016 334 NOT AVAILABLE FROM EDRS

RECREATION AND MENTAL RETARDATION.
Avedon, E. M., Public Health Service (Dept. Health, Education and Welfare), Arlington, Va., 1966. Available for 15¢ from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

In a discussion of recreation and mental retardation, recreation and its role in providing enjoyment and opportunities to let off steam,

resolve conflicts, and improve feelings of personal worth are defined. The importance of recreation in preventing motor retardation and physiological and psychological impairments in the mentally retarded is described. Recreative responsibility is placed primarily with the family. Helpful agencies, including public schools, youth associations, community centers, and municipal recreation centers, are listed. Recreation program planning for the retarded is discussed, and the need to provide activities appropriate to each individual's sex, age, socioeconomic status, and abilities is presented. Specific suggestions are given for home, school, and community and agency programs. Several programs administered by the Department of Health, Education and Welfare having the authority to support activities in the field of recreation and mental retardation are described. Also listed are (1) agencies of help in establishing local community recreation programs, (2) four nonprofit agencies in mental retardation, (3) three non-profit and fifteen national organizations in recreation, and (4) nine references of help in developing recreational services for the mentally retarded. (JA)

ED 016 371 MF - $0.25, HC - $1.55

FACILITIES AND SPACE ALLOCATION FOR PHYSICAL EDUCATION OUTDOOR TEACHING STATIONS FOR ELEMENTARY AND INTERMEDIATE PUBLIC SCHOOLS.
Dexter, Genevie, and Early, Doyt, California State Dept. of Education, Sacramento, 1967, 29p.

The purpose of this bulletin is to present recommendations for minimum outdoor facilities and space allocations for a balanced physical education program for grades K-8 in public schools. In the bulletin only space requirements for physical education teaching stations are described. Included in the bulletin are recommendations for site planning and space arrangements as they are related to grade level, types of surfacing and pupil-space ratios. Suggestions are made for apparatus and game area space allocations. Also included are charts, diagrams and matrices pertaining to the K-8 physical education program. (GM)

ED 016 606 NOT AVAILABLE FROM EDRS

MANUAL OF OUTDOOR CONSERVATION EDUCATION.
Shomon, Joseph J., National Audubon Society, New York, N.Y.
Available for $2.00 from The National Audubon Society, Nature Centers Division, 1130 Fifth Avenue, New York, N.Y. 10028.

The purpose of this bulletin is to present and clarify selected concepts in outdoor conservation education and to organize guidelines for directors, teachers, naturalists, and administrators of outdoor facilities to enable them to use the outdoor environment as an effective classroom. The outdoor education topics include (1) a perspective

and philosophy, (2) the reasons for teaching outdoor education, (3) objectives, (4) where, what, and how to teach, (5) educational facilities, aids, and features, and (6) administration and programing. Also included are a selected bibliography and a list of the materials and services offered by the Nature Centers Division of the National Audubon Society. (DS)

ED 016 607 NOT AVAILABLE FROM EDRS

TRAIL PLANNING AND LAYOUT.
Ashbaugh, Byron L., National Audubon Society, New York, N.Y., 1965. Available for $2.50 from The National Audubon Society, Nature Centers Division, 1130 Fifth Avenue, New York, N.Y. 10028.

This guidebook provides practical information for the outdoor educator on trail planning, layout, construction, and use. It includes information on (1) background and perspective, (2) kinds of trails, (3) design, construction, and maintenance of trails, (4) trail features, (5) signs, labels, and guides, and (6) teaching on the trail. Appended are (1) information on trail signs and labels, self-guiding trail leaflets, and post guides for self-guiding trails, (2) information on the plot or quadrant method for ecological studies, (3) lists of information-education publications and professional field services available from the Nature Centers Division, (4) a listing of other sources of assistance available, and (5) a list of the nature centers and farms operated by the National Audubon Society. (DS)

ED 017 088 MF - $0.50, HC NOT AVAIL.

RECREATION AND PHYSICAL ACTIVITY FOR THE MENTALLY RETARDED.
Council for Exceptional Children, Washington, D.C., American Association for Health, P.E. and Recreation, 1966, 92p. Available for $2.00 from The Council for Exceptional Children and The American Association for Health, Physical Education and Recreation, 1201 16th Street, N.W., Washington, D.C. 20036.

Special educators, physical educators, parents, and volunteers can provide recreation for the mentally handicapped. Background information about the mentally handicapped and their special needs in a recreational program are considered. Objectives of play and of recreational programs and suggestions for program implementation and instruction are presented. Specific examples of varied types of activities are listed. Included is a 114-item annotated bibliography. (HJ)

ED 017 103 MF - $0.50, HC - $5.75

RECREATION AND SOCIALIZATION FOR THE BRAIN INJURED CHILD.
Gordon, Sol, and Golub, Risa S., New Jersey Assn. for Brain Injured Children, 1966, 113p.

Designed for parents and specialists planning therapeutically oriented recreational and socialization programs for brain injured children, this

document contains 13 chapters by different authors. Activities discussed are generally noncompetitive, emphasizing structure and limit. Discussed are (1) the role of the optometrist with the inadequate learner, (2) organization and administration of recreational programs, (3) activity guides, (4) games and exercises for adolescent boys, (5) recreation and socialization activities for the adolescent girl, (6) instructional swimming programs, (7) a therapeutic recreation program, (8) organization of a summer day camp, (9) an individual and group perceptual motor training program, (10) a day school recreation program, (11) perceptual motor training for early primary grade children, (12) guidance for parents, and (13) parent counseling. Views from parents are reported. A supplement treats preschool perceptual skills and optometric visual care. Concerned organizations, resources, & a 50-item bibliography are provided along with individual bibliographies for some chapters. (JD)

ED 017 110 MF - $0.25, HC NOT AVAIL.

PHYSICAL EDUCATION AND RECREATION FOR THE MENTALLY RETARDED.
American Assn. for Health, P.E. and Recreation, Joseph P. Kennedy, Jr. Foundation, Washington, D.C., 1967, 47p.
Available from The American Association for Health, Physical Education and Recreation, 1201 Sixteenth St., N.W., Washington, D.C. 20036.

This guide contains an annotated list of selected audiovisual materials in physical education and recreation for those working in the field of mental retardation. Information about the technical aspects, subject matter, and rental or purchase is provided for 32 films, 23 records, 16 tape recordings, and three slide presentations. (TM)

ED 017 348 MF- $0.50, HC - $4.00

A CAMPING WE WILL GO.
Wykoff, Jack N., and Others, Battle Creek Public Schools, Mich., 1967, 78p.

Various educational experiences in outdoor education for children in grades 5 and 6 are the subject of this teaching guide. Functional experiences in outdoor education can be achieved in the areas of-- (1) social living, (2) work experiences, (3) health education, and (4) outdoor education, and as an extension of the classroom involving studies of health, skills, and social studies. Specific activities are described in the areas of language arts, mathematics and measurement, native arts and handicrafts, recreation and outdoor sports, science and conservation education, and social studies. Each of the various activities suggested is described in terms of time perspective, description of activity, equipment needed, seasonal availability, and learning possibilities stemming from the activity. This teaching guide concludes with an outlined description of classroom teacher responsibilities in the resident outdoor program. (JS)

ED 017 371 MF - $0.25, HC - $1.70

SOIL AND WATER CONSERVATION PROJECTS AND ACTIVITIES, A GUIDE FOR 4-H CLUB LEADERS.
Foster, Albert B., and Fox, Adrian C., Department of Agriculture, Washington, D.C., 1961, 32p.

This publication was prepared by the Soil Conservation Service for use with youth groups. Various activities and projects are presented which can be used to develop concepts about soil and water conservation. In order to simplify the process of demonstrating these activities, many of the concepts are pictorially illustrated. The activities include-- (1) making soil artificially, (2) comparing the size of different types of soil particles, (3) how soil is affected by water, plants, and organic matter, (4) how a stream carries sediment, (5) the value of contouring, (6) how fertilizer affects plant growth, (7) how birds help destroy insects, (8) the many uses of wood, and (9) building a model conservation farm. (ES)

ED 017 372 MF - $0.25, HC - $2.50

RURAL RECREATION ENTERPRISES FOR PROFIT, AN AID TO RURAL AREAS DEVELOPMENT.
Department of Agriculture, Washington, D.C., 1963, 48p.
Also available for $0.20 from The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Many rural areas of the U.S. possess enough space and natural attractions to serve as a basis for establishing either part- or full-time recreational enterprises. Most outdoor leisure activities center around water, hunting and fishing, admiring scenery, and enjoying the natural rural landscape. Thus the development of rural recreation resources is largely a matter of the use and management of land, water, plants, and wildlife. This bulletin describes some of the opportunities for income-producing recreation enterprises on private land in the United States. Assistance is available from the U.S. Department of Agriculture and other public agencies to develop the nation's rural recreation resources. In any locality, the separate public services and individual enterprises can be combined into a substantial economic force through the USDA's rural areas development program. (ES)

ED 017 374 MF - $0.25, HC - $1.30

RURAL RECREATION, NEW OPPORTUNITIES ON PRIVATE LAND.
Department of Agriculture, Washington, D.C., 1963, 24p.
Also available for $0.20 from The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

About 90 percent of all Americans participated in some form of outdoor recreation in the summer of 1960, and the total number is expected

to increase threefold by the turn of the century. A list of the most popular outdoor activities includes driving, walking, games, swimming, sightseeing, bicycling, fishing, hiking, boating, and picnicking. Although a few recreational resources are within the suburbs, the majority are in the more rural areas of the nation. Many such resources are on private land--ponds, accesses to streams, toboggan slopes, ice skating arenas, picnic accommodations, camping facilities, and hunting areas. A section is included on how the USDA can help to establish private recreational sites through technical and financial assistance, education, research, and rural areas development. (CL)

ED 017 376 MF - $0.25, HC - $1.90

INCOME OPPORTUNITIES FOR RURAL FAMILIES FROM OUTDOOR RECREATION ENTERPRISES.
Bird, Ronald, and Inman, Buist, Department of Agriculture, Washington, D.C., 1965, 36p.

Many low income areas of the U.S. possess natural attractions which can be used as a basis for establishing either part- or full-time recreational enterprises. The success of people undertaking these types of business ventures depends on their managerial ability in assessing demand, acquiring the necessary capital, building appropriate facilities, satisfying customers, and maintaining relatively low costs. This report summarizes data obtained from studies on recreational enterprises in 6 areas of the U.S. which were made to determine their financial success. Cash income exceeded expenses for 86 percent of the 254 recreational enterprises analyzed, but most of the businesses returned less than $10 per day to operator and family labor. Successful operators attributed their success to--(1) location on or near a paved road or near a public recreational area, (2) advertising, (3) well-trained employees, (4) a variety of facilities to interest the entire family, (5) well-developed community enterprises that encourage a longer season, (6) an attractive facility, and (7) good service and catering to individual wishes of customers. Those recreational businesses capable of yielding enough income to support a family required full-time efforts of at least one worker and an investment of over $50,000. They included youth camps, minnow farms, shooting preserves, dude ranches, and recreational complexes. (ES)

ED 017 377 MF - $0.25, HC - $1.25

AN OUTLINE FOR TEACHING CONSERVATION IN HIGH SCHOOLS.
Department of Agriculture, Washington, D.C., 1952, 23p.

This outline has been organized in a form which permits the teaching of conservation to the greatest number of students, by interweaving the subject with the physical and social sciences commonly taught in high schools. The conservation of natural resources is an integral

part of these sciences and becomes more meaningful to students when the interrelationship is accomplished. Not all the possibilities of integrating conservation into the related subjects have been explored, but most of the obvious relationships between current subject matter and conservation are pointed out. The entire field of natural resources is covered, with particular emphasis on soil and water. (ES)

ED 017 445 MF - $0.50, HC - $3.40

OUTDOOR EDUCATION CENTER, PLANNING PROJECT REPORT.
Cockrell, Lloyd, Albuquerque Public Schools, New Mexico, 1966, 66p.

Reported are the plans for a proposed outdoor education program for the Albuquerque public schools. Discussed are (1) a program rationale, (2) curriculum, (3) materials for outdoor teaching, (4) staffing, (5) pupil selection, (6) the educational plan, (7) description of proposed facilities and physical characteristics, (8) budget estimates, (9) cooperating agencies, and (10) the framework for evaluation. (DS)

ED 017 473 MF - $0.50, HC - $6.10

SCIENCE EDUCATION INFORMATION REPORT, BIBLIOGRAPHY 4, CURRICULUM.
ERIC Inform. Anal. Cen. for Sci. Educ., Columbus, Ohio, 1967, 120p.

This is the fourth in a series of general bibliographies which are being developed to disseminate information concerning documents analyzed at the ERIC Information Analysis Center for Science Education. Reported are over 350 citations to selected documents on curriculum and curriculum development in science education. The documents included represent research reports, research reviews, conference reports, position papers, textbooks, program descriptions, speeches, and numerous other types. The citations are categorized in alphabetical order by author and indicate the availability and the major ideas of the document. General bibliographies have been or are being prepared for other selected areas in science education. All bibliographies will be supplemented periodically as more documents are added to the system. The general bibliographies will be announced in "Research in Education" and the "SEIAC Newsletter" as they become available. (DS)

ED 017 476 MF - $0.50, HC - $3.85

PROJECTS IN IMAGINATIVE NATURE EDUCATION, SURVEY REPORT AND OUTDOOR LABORATORY PLAN.
National Audubon Society, New York, N.Y., 1967, 75p.

This plan suggests how the Mid-Hudson-Catskills Museum can work creatively with cooperating school districts to strengthen their curriculums through outdoor education. The result of this cooperative

endeavor is to be an outdoor laboratory called "Gateway Center" located near New Paltz, New York. Part 1 contains (1) background information, (2) objectives of an outdoor interpretive program, and (3) descriptive data, including general geological and ecological characteristics of the property leased for the project. Part 2 contains (1) statements of uses which are compatible and incompatible to an outdoor laboratory, (2) descriptions of necessary improvements to implement the educational and recreational program, and (3) a description of suggested program offerings. Appended are (1) suggested principles of conservation to be stressed and recommended methods of illustration, (2) tips for field trip fun, and (3) suggestions for habitat maintenance and improvement, including specific management practices for selected bird and animal species. (DS)

ED 017 480 NOT AVAILABLE FROM EDRS

CONSERVATION EDUCATION, A SELECTED BIBLIOGRAPHY.
Carvajal, Joan, and Munzer, Martha E., Conservation Education Assn., Billings, Mont., 1968. Available from the Interstate Printers and Publishers, Danville, Illinois 61832.

This bibliography contains references to printed materials covering various aspects of conservation education which were published in the United States from 1957 to 1966, which are still in print, and which can be obtained without great difficulty. Some titles published before 1957 also are included. Publications of governmental agencies or of organizations which are not primarily publishers have been excluded. Most of the citations are annotated. Suggested reading levels are provided for each entry. Part 1 of the document categorizes titles in such areas as (1) ecology, and (2) natural resources including extensive coverage of air, water, plants, animals, soil, land, and energy resources. Part 2 contains titles relating the role of man categorized into such topics as (1) the history of conservation, (2) the quality of the environment, (3) the social implications of conservation, (4) the population effects, and (5) the conservation planning. Part 3 deals with instructional aids for the teacher and contains titles on (1) student activities and teaching techniques, (2) teacher references including directories and bibliographies, (3) visual aids, and (4) career guidance. A section also is devoted to books for leisure reading intended to provide pleasure and inspiration for people of all ages. The individual document cost and the cost for a complete collection are given. (DS)

ED 017 970 MF - $0.50, HC NOT AVAIL.

PLANNING AND FINANCING SCHOOL-COMMUNITY RECREATION, REPORT OF THE NATIONAL CONFERENCE ON PLANNING AND FINANCING SCHOOL-COMMUNITY RECREATION (LOS ANGELES, DECEMBER 27-30, 1966). Troester, Carl A., Jr., and Others, American Assn. for Health, P.E. and Recreation, 1967, 113p. Available from American Association for Health, Physical Education and Recreation, A Department of the National Education Association, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

Increased pressures for providing various public recreation programs have led communities and school districts to search for increased financial support to maintain recreation services at existing levels or to initiate new programs. This book is a collection of papers presented at the National Conference on Planning and Financing School-Community Recreation in Los Angeles, California, December 27-30, 1966, sponsored by the Recreation Division of the American Association for Health, Physical Education, and Recreation. The conference program focused on such topics as (1) Federal, state, and local patterns of support, (2) sources and methods of obtaining funds, (3) availability of resources for program, leadership, research, planning, and acquisition and development, and (4) reports of successful city, county, and school programs of recreation. Practical solutions to the specific and immediate problems of paying for needed recreational facilities and programs were emphasized. (HW)

ED 018 046 MF - $0.25, HC - $1.45

RECREATION FOR THE HANDICAPPED, A BIBLIOGRAPHY. SUPPLEMENT I. Freeberg, William H., and Lunan, Bert, Southern Illinois Univ., Carbondale, Vocational Rehabilitation Admin. (Dept. of Health, Education and Welfare), 1967, 27p.

Listing 442 references from January 1,1965, to January 1, 1967, this bibliography on recreation for the handicapped supplements the original bibliography of references from the 1950-65 period. Entries are arranged in 13 categories suggested by an advisory committee: (1)general philosophy, (2) administration of recreation facilities, (3) leadership and management, (4) programs (camping, clubs, activities, playgrounds, rhythm, music, dramatics, sports, and varied physical activities), (5) characteristics of groups, (6) training and experience for recreation personnel, (7) community development, (8) audiovisual materials, (9) institutional recreation, (10) multidisciplinary activities in recreation, (11) standards and accreditation policies, (12) socialization and rehabilitation, and (13) bibliographies. (DF)

ED 018 284 MF - $0.25, HC - $2.30

CONSERVING OUR NATURAL RESOURCES, A 4-H LEADER'S GUIDE.
Amick, W. Robert, and Others, Department of Agriculture, Washington, D.C., 1965, 44p.

An effective 4-H conservation program is developed around the following basic concepts--(1) Man is a part of the natural world, in which there are many valuable materials; (2) Man has learned to use many of those materials for human sustenance and betterment; and (3) Man's economic, social, and general welfare is largely dependent upon the manner and extent to which we utilize and manage our natural wealth. In order to promote conservation by 4-H members, a committee of federal and state agencies and industry groups was organized to prepare this leader's guide which presents five sections dealing with the conservation of soil, water, forests, grasslands, and wildlife. (ES)

ED 018 310 MF - $0.25, HC - $1.50

FOREST RECREATION FOR PROFIT, SELF HELP SUGGESTIONS FOR RURAL AREAS DEVELOPMENT.
Department of Agriculture, Washington, D.C., 1962, 28p.
Available for $0.25 from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Farmers and other land owners can utilize woodland for profit by developing recreation areas. Campground and picnic areas can provide additional income and can fit in with the operation of other small businesses, such as a roadside store, a produce stand, or a filling station. Basic considerations in planning a recreation development include--(1) distance from population centers, (2) distance from main roads, (3) natural attractions, (4) type of development, (5) state and local laws and regulations, (6) local competition, (7) financing, (8) business attractions, and (9) expansion possibilities. In making an overall plan, one should consider campground design and layout, tent and trailer camp units, picnic units, proper sanitary facilities, maintenance and operation obligations and problems, and safety and liability. Sources of assistance are listed. (SF)

ED 018 315 MF - $0.25, HC - $2.05

LET'S DEMONSTRATE SOIL AND WATER CONSERVATION FOR BETTER FARMING, BETTER LIVING.
Leyendecker, Philip J., New Mexico State University, University Park, 1961, 39p.

Eighteen demonstrations on the subject of soil and water conservation are presented. These demonstrations utilize simple and inexpensive equipment and are suitable for classroom or other group use, although

they were designed for 4-H clubs. Listed are the equipment and materials needed, previous preparation, steps in the demonstration, and expected learnings. (SF)

ED 018 376 MF - $0.50, HC - $3.20

THE FIELD STUDY NOTEBOOK FOR THE OUTDOOR SCHOOL.
Gilfillan, Warren C., and Burgess, Robert A., 1966, 62p.

The "Field Study Notebook" has been prepared for use by parochial and public elementary school students for studying ecology at an outdoor school. The notebook emphasizes community dynamics through student activities that illustrate ecological relationships. Information is provided on the organization of a field study and on performing various activities. Space is provided for the student to record his observations and activities. The four major sections of the notebook deal with the study of (1) soil, (2) plants, (3) aquatic habitats, and (4) terrestrial vertebrates and invertebrate organisms. Some of the activities are (1) pH determination, (2) temperature determination, (3) determination of species composition and stratification, (4) determination of present and past influences on the communities, (5) determination of height, diameter, and age of trees, (6) the study of a rotting log, (7) slope measurement, and (8) determination of stream flow. Questions relative to the student's observations are distributed throughout the notebook. A glossary is provided for each section. A brief pictorial guide is available for assistance in identifying common aquatic invertebrate organisms. A related document is ED 018 383. (DS)

ED 018 383 MF - $0.25, HC - $2.10

THE TEACHERS' HANDBOOK FOR THE OUTDOOR SCHOOL.
Gilfillan, Warren C., and Burgess, Robert A., 1966, 40p.

This handbook for Oregon public and parochial elementary school teachers is for use in planning and utilizing the outdoor school of the regional outdoor education program headquartered at Portland, Oregon. The outdoor school which utilizes camps owned by youth-serving organizations provides elementary classes (primary grade 6) and their teachers the opportunity to experience a week of living in close association with others and learning from direct contact with their environment. Many of the learnings are outgrowths of the regular school curriculum, while others are unique because they cannot be experienced in the classroom. The teachers and their classes are in school about five hours per day. A large share of the direction and actual instruction of the students is done by the outdoor school staff. The document is divided into six sections. Section 1 deals with the definition of the outdoor school and the history of the outdoor school in Oregon. Section 2 presents the role of the classroom teacher in the outdoor school. Section 3 describes the organization of the outdoor school.

Section 4 is concerned with parent, student, and teacher orientation to the outdoor school program. Emphasis is placed on classroom student activities which will help prepare students for the outdoor school. Section 5 deals with health forms, permission forms, arrival procedures, insurance, departure procedures, and other specific information needed by the teacher. Section 6 discusses teacher follow-up after the week at the outdoor school. A related document is ED 018 376. (DS)

ED 018 396 NOT AVAILABLE FROM EDRS

A CRITICAL INDEX OF FILMS AND FILMSTRIPS IN CONSERVATION DEALING WITH RENEWABLE RESOURCES, NON-RENEWABLE RESOURCES, RESOURCES AND PEOPLE, AND ECOLOGY.
Train, Russell E., Conservation Foundation, Washington, D.C., 1967. Available for $1.00 from O'Hare Books, 10 Bartley Road, Flanders, New Jersey 07836.

Listed are the films and filmstrips selected from over 7,000 which have been screened and evaluated by the Conservation Foundation's Audiovisual Center as the best available in the field on conservation education. Part 1 lists films under the categories of (1) renewable resources, (2) non-renewable resources, (3) resources and people, (4) ecology, and (5) films to fit specific problems such as those involving pesticides, pollution, recreation, teaching conservation, community action, and universal action. The information on each film includes (1) title, (2) whether it is color or black and white, (3) time, (4) source, (5) whether it is for rent or for sale, or both, and (6) a brief description including the audience level for which it is intended. Part 2 gives three lists of films and filmstrips which were selected by three teachers, independently, as the most effective for conservation education. One list is directed specifically at the junior high school. The other two have selections to cover various topics and audience levels. The presentation format is the same as in Part 1. Part 3 includes alphabetized listings of (1) film distributors, (2) filmstrip distributors, and (3) United States Department of Agriculture film rental libraries. (DS)

ED 018 923 MF - $0.25, HC - $1.55

PLANNING THE OUTDOOR PHYSICAL EDUCATION FACILITIES FOR CENTRAL SCHOOLS. PLANNING THE OUTDOOR PHYSICAL EDUCATION FACILITIES, NO. 10.
State University of New York, Albany, New York State Education Department, Albany, 1967, 29p.

Planning outdoor physical education facilities for the central school serving pupils from kindergarten through high school should take into account the needs and interests of all pupils during the

school year and should provide for recreation needs during vacation periods. Provision for recreational facilities for adults should also be made. The first of five distinct play areas described is the elementary area. Three acres for 300 pupils plus one-half acre per hundred pupils over this amount are needed for this purpose. Areas for kindergarten should include turf, apparatus, and shade. Secondly, courts should be provided. An acre is suggested for facilities of this kind. A third area should be for high school girls. Two acres are needed for the various field activities of this group. The fourth area should be for high school boys. Three acres will be sufficient for the activities of this group. The last area should be for interscholastic athletic competition. Various plans are suggested which require differing amounts of space. Some areas may be able to consider winter activities also. The site will determine whether or not sliding will be feasible, and skating is yet another consideration. Numerous drawings of regulation fields and courts are provided. (RH)

ED 018 946 MF - $0.25, HC - $2.15

PLANNING YOUR PLAYGROUND.
Burke (J.E.) Co., Fond Du Lac, Wis., 41p.

This document reviews the value of playground apparatus, factors in selection of equipment, and considerations in planning playgrounds. Also included are sections on types of play devices, construction of playground apparatus, unusual playground apparatus, care of equipment, sources of accidents or dangers on playgrounds, and equipment space requirements. Assembly, erection, and field painting suggestions are also discussed. Healthful exercises for outdoor gym sets and surfacing play areas are explained. Several playground layout and specification diagrams are included. (RK)

ED 019 792 MF - $0.25, HC - $2.75

DIRECTORY OF RESIDENTIAL CAMPS SERVING THE MENTALLY RETARDED.
National Assn. for Retarded Children, New York, N.Y., 1967, 53p.

Prepared by the National Association for Retarded Children from a questionnaire sent to state and local organizations, the directory (1967) lists resident camps serving the mentally retarded throughout the United States. Camps are entered alphabetically according to geographic location within each state. Types of children served include mentally retarded, educable mentally retarded, trainable mentally retarded, physically handicapped, emotionally disturbed, cerebral palsied, and brain injured. For each camp descriptive information states handicaps served, age range, season, fee, and capacity. Names and addresses of the sponsor and the contact for each camp are listed throughout. A companion volume on day camps is also available. (JD)

ED 019 844 MF - $0.25, HC - $1.00

ADJUSTABLE OUTPUT RATE CHEMICAL FEEDING EQUIPMENT FOR SWIMMING POOLS. NATIONAL SANITATION FOUNDATION STANDARD NUMBER 19.
National Sanitation Foundation, Ann Arbor, Mich., 1967, 18p.

The scope of this standard covers adjustable output rate chemical feeders, whether used for solutions, slurries or solids. It also includes auxiliary equipment such as pumps, strainers, tubing connections, tanks, injection fittings and other required components. The feeders described are intended to be designed and used specifically for chemical feeding for both public and private residential swimming pools. Not included in this standard are gaseous feed equipment, feeders without adjustable output rates, or feeders whose output rate is dependent on the flow rate of the medium into which the chemicals are introduced. Section 1 includes--(1) minimum requirements, (2) alternate materials, (3) reviews and revisions, and (4) variations in design and operation. Section 2 covers definitions and terminology; section 3, suitable materials; and section 4, design and construction. (RH)

ED 020 053 MF - $0.25, HC - $2.30

EIGHTH GRADE UNIT, SEA--RESTLESS GIANT.
Chapman, Frank L., Carteret County Public Schools, Beaufort, N.C., 1968, 44p.

An eighth grade unit guide on oceanology has been developed by the Carteret County Public Schools of Beaufort, North Carolina. Narrative and diagrammatic descriptions deal with various ocean phenomena, such as tides, waves, currents, ocean floors, beaches, etc. Class questions and discussion questions are provided at the end of each section of the unit. A vocabulary list is found at the end of each narrative discussion. Related documents are ED 020 828, ED 020 829, and ED 020 830. (DK)

ED 020 070 MF - $0.25, HC - $0.70

THE PLACE OF PURPOSEFUL RECREATION IN RURAL AMERICA TODAY.
Stevens , Lawrence N., 1964, 12p.

American use of outdoor recreational facilities has increased tremendously since the end of World War II. With a population of 180 million that is to double by the year 2000, it is estimated that the use of these facilities will triple by the same date. Recreation will become a major segment of the rural economy. The interest taken by

the Federal Government in this area is shown by the development of the Outdoor Recreation Resources Review Commission in 1958, and as a result of their report in 1962 the creation of the Bureau of Outdoor Recreation and the Recreation Advisory Council by the President in that same year. The purpose of the Council is to provide broad policy advice and facilitate coordinated efforts among the various Federal agencies. The Bureau of Outdoor Recreation serves as staff to the Council. Public Law 88-29, the Organic Act, authorizes the following Bureau functions--a continuing inventory of recreation needs and resources, a classification of these resources, a nationwide plan for outdoor recreation, provision of technical assistance, encouragement of interstate and regional and interdepartmental cooperation, and requirement of Federal agencies with recreation responsibilities to consult with the Secretary of the Interior. Its ideal purpose is to make outdoor recreation accessible to all Americans. This speech was presented to the American Country Life Association Meeting (Washington, D.C., July 7, 1964). (DK)

ED 020 072 MF - $0.25, HC - $0.45

PURPOSEFUL RECREATION AND PERSONAL GROWTH IN RURAL AREAS, THE EDUCATION-EXTENSION ROLE.
Niederfrank, E. J., 1964, 7p.

Use of private land in rural areas for recreational facilities would provide a new source of income to the rural population while meeting increasing recreational needs. It is the role of the extension service at the state and local levels to educate the rural population in utilization of recreational resources. Important considerations in recreation resource development are attitudes of the rural family and nearby communities, management capabilities of the potential facility operator, and economic feasibility of the operation. Education in this area must include motivation, explanation, organization, planning, and evaluation. Involvement of other state and local resources and agencies is valuable in achieving sound program development. This speech was delivered at the annual meeting of the American Country Life Association (Washington, D.C., July 7-8, 1964). (JEH)

ED 020 129 MF - $0.50, HC - $5.75

TEACHER'S GUIDE TO OUTDOOR EDUCATION.
Ryan, Arthur J., Union County Outdoor Education Center, Linden Board of Education, N.J., 113p.

Included are (1) a descriptive brochure, and (2) a teacher's guide for the Union County Outdoor Education Center. The program consists of a day center, which provides one- and two-day sessions of at least four hours'duration for grade 5 students from public and non-profit schools in Union County. The descriptive brochure relates (1) the location of

the area, (2) the history of the area, (3) a brief description of the field activities used in working with various disciplines and suggested outcomes, (4) a checklist of the trees and birds of the area, and (5) a map of the area. The teacher's guide discusses (1) a program rationale, (2) program objectives, (3) teacher planning including advanced preparation, classroom followup, group control, and health and safety suggestions, and (4) the integration of outdoor education with the school curriculum. A resident camp is being developed on a separate location which, when established, will concentrate on grade 6 students and allow the day camp to concentrate on grade 5 students. Appended are (1) copies of the daily schedule and various required permission forms, (2) listings of activities, (3) suggested classroom follow-up activities, (4) sources of pertinent publications, and (5) an annotated bibliography. (DS)

ED 020 135 MF - $0.50, HC - $5.10

EDUCATION IN NATURAL RESOURCES, PROCEEDINGS AND RELATED PAPERS FROM A SEMINAR SERIES AT COLORADO STATE UNIVERSITY 1963-64.
Foss, Phillip O., Colorado State Univ., Ft. Collins, 1964, 100p.

Reported are the seminar papers and proceedings of a conference which investigated the field of natural resources and made recommendations on the course and direction of natural resources study at the college or university level. The conference and seminars held at Colorado State University during 1963-64 gave participating faculty members an opportunity to draw upon the ideas and experience of knowledgeable persons engaged in the study and practice of resources management. Part 1 is a compendium of a conference, "Training in Natural Resources for Governmental Personnel," attended by representatives from the various university departments and from state and Federal agencies. Parts 2-5 relate the texts of seminar papers, presented by recognized authorities who discussed provisions for developing trained, professional personnel in the numerous fields of natural resources. Unanimity was not present for all issues. However, it was concluded that (1) an undergraduate curriculum in natural resources is defensible and may be desirable as a "general education" or "liberal arts" type program, (2) most present university programs are inadequate in providing necessary training for resource managers, (3) a split-major might be an answer to the problem posed in item 2, (4) there is a need for revision of the graduate program (suggested revisions are included), (5) increased exchanges of personnel between resource organizations and the university would be desirable, and (6) there should be better coordination of research between the universities and cooperating agencies. (DS)

ED 020 136 MF - $0.50, HC - $3.45

AN ANALYSIS OF STATE ADOPTED TEXTBOOKS RELATIVE TO CONSERVATION EDUCATION INFORMATION.
Gwinn, Herbert D., California State Dept. of Education, Sacramento, 1967, 67p.

Evaluated was the conservation content in elementary and secondary school textbooks adopted by the State of California in the areas of science, health, history, geography, and literature. The evaluation was performed by an ad hoc committee composed of junior college teachers, secondary and elementary school teachers, and a consultant. Concluded were that (1) the newly adopted textbooks are weak in their offerings for conservation education, (2) some supplementary texts offer more hope for better learnings than are offered in the basic texts, (3) the method of selection of all texts needs more scrutiny and analysis, (4) successful teachers who are leaders in their field should make the textbook selection, (5) man-caused problems which result in environmental deterioration were universally omitted from the texts, and (6) with no designated leader in this field at the state department of education level (in most school districts, as well) it is only through prolonged and persevering efforts of dedicated handfuls of educators that any real conservation is learned at all. Appendix A provides an annotated evaluative list of basic and supplementary texts in the areas of (1) reading and literature, (2) science, (3) health, (4) history, (5) geography, (6) social sciences, and (7) government. Also, it provides examples of specific critical analyses used in evaluating the materials. (DS)

ED 020 283 MF - $0.25, HC - $0.80

RECREATION FOR THE RICH AND POOR, A CONTRAST.
Kraus, Richard G., 1965, 14p. Journal citation: QUEST, Monograph 5, Winter Issue, December 1965.

The divergence between the leisure activities of affluent and poor Americans is discussed. Paradoxically, those with the greatest amount of free time--the poor--have the least money with which to enrich their leisure time. While it is true that an extraordinary variety of leisure activities are now available, only the middle and upper classes can make use of them. Not only are the poor economically unable to enjoy most of the recreation facilities which are available, but they are further restricted by not knowing how to use personal leisure constructively. The recreation and leisure needs of the poor, therefore, should be met by Federal, state, and local governments and by voluntary organizations and agencies with specifically designed services and programs. (NH)

ED 020 830 MF - $0.25, HC - $0.75

A FIELD EXPERIENCE--A WHY, A HOW.
Yeater, L. W., Marine Science Project, Beaufort, N.C., 1967, 13p.

The Carteret County Marine Science Project offers the science teacher the means of providing a directed discovery, field-oriented approach to the study of oceanology. Specialists provide audio-visual materials, and do the planning, organization, and direction of practical field experiences. Following the field experience, a marine science project representative will usually return to the classroom to review highlights of the trip, discuss answers to field problems previously presented, and establish areas which might profitably be investigated on future field exercises. The marine science project also provides the individual teacher with a source of a wide range of oceanological materials, in addition to a complete library and periodical file. (DA)

ED 020 847 MF - $0.50, HC - $4.15

PROGRAM OF OUTDOOR EDUCATION FOR SOUTHERN IDAHO, CURRICULUM GUIDE.
Faith, David W., and Du Bois, Denis C., American Falls School District No. 381, Idaho, 1968, 81p.

Educational objectives, concepts, experiences, and data to be covered are presented with suggested activities and daily lesson plans to provide teachers in a summer outdoor education program with materials to reinforce and enhance traditional classroom learning. Weekly unit plans in science, language arts, mathematics, and social studies cover the concept to be developed, problems, problem-solving activities, and follow-up activities. The appendix includes (1) additional activities, with objectives and experiences, in each of the foregoing subject areas as well as natural science, earth science, and fine arts, (2) suggested travel activities related to the various subject areas, and (3) text-book references, bibliography, and audiovisual aid suggestions. (SW)

ED 020 850 NOT AVAILABLE FROM EDRS

CURRICULUM ENRICHMENT OUTDOORS.
Hug, John W., and Wilson, Phyllis J., 1965. Available from Harper and Row, Publishers, Evanston, Ill. 60204.

Outdoor education is not an additional subject in the curriculum, but is a way of learning in which the natural environment is effectively used to teach that part of the curriculum that can best be taught outdoors, and to vitalize other parts through first-hand experiences. The 363 suggested activities in this book are designed to

provide inspiration for many teachers to initiate outdoor education experiences, to give additional help to those teachers already engaged in outdoor education, and to enrich varied school curriculums. Activities are listed according to grade levels, primary through ninth grade. A bibliography of references for teachers is included, as well as a list of publishers of children's materials useful in outdoor education. (DK)

ED 020 898 MF - $0.25, HC - $0.65

SCIENCE INTERPRETIVE PROGRAM--SPERMACETI COVE INTERPRETIVE CENTER.
Cole, Richard C., Middletown Township Board of Educ., Highlands, N.J., 1967, 11p.

Described is the outdoor education program for the Middletown, New Jersey, elementary schools at the Spermaceti Cove Interpretive Center in Sandy Hook State Park. The program is funded under PL 89-10 of the Elementary and Secondary Education Act (ESEA). Phase 1 (March, 1966-June, 1966) involved the selection of nine public and three parochial fourth-grade classes to participate in a geology program entitled "A Handful of Sand." The goal of the geology program is to trace beach sand to its rock origin, examine the forces that release and transplant this material, and study the need for conservation in shore areas. In Phase 2 (September, 1966-June, 1967) 40 fourth-grade classes from Middletown elementary schools attended the geology program. Fifteen grade 5 classes attended a pilot biology program. The biology program develops concepts related to the producer-consumer-decomposer relationships existing in the environment. Phase 3 (September, 1967-June, 1968) involved all the Middletown area fourth and fifth grades attending their respective programs at the center. Fifteen grade 6 classes attended a pilot marine biology program. The grade 6 program develops the broader concepts of the value, use, and conservation of marine and estuarine areas. Descriptions of program objectives, the grade 4, 5, and 6 program courses of study, and projected plans are included. (RS)

ED 020 905 MF - $0.75, HC NOT AVAIL.

INDEX OF SELECTED OUTDOOR RECREATION LITERATURE.
Department of the Interior, Washington, D.C., 1967, 156p.
Available for $0.75 from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Indexed are 991 periodicals, reports, books, and other publications containing information pertinent to outdoor recreation which were received by the Department of the Interior Library during 1966. This should not be mistaken for a comprehensive bibliography of outdoor recreation literature because not all publications received by the Department of the Interior Library have been examined for content

relative to outdoor recreation. The four categories used in classifying documents are (1) outdoor recreation resources, (2) administration of resources and programs, (3) recreation users, demand and values, and (4) research. Information for each publication includes a bibliographic citation and a brief abstract. The material is indexed in three forms. A subject index identifies citations by the use of nearly 1,000 key words or descriptors related to outdoor education. A name index designates citations by author, editor, individuals and associations discussed in the article, or other proper names except geographic locations. A geographic index identifies citations by countries, geographic region, states, counties, cities, and rivers, as well as by proper names of units administered by Federal and state agencies which appear in the document. Appendices include (1) listings of the periodicals scanned in developing the index, and (2) a listing of serial publications. (DS)

ED 020 916 MF - $0.25, HC - $0.85

SCIENCE EDUCATION INFORMATION ANALYSIS CENTER NEWSLETTER.
ERIC Inform. Anal. Cen. for Sci. Educ., Columbus, Ohio, 1968, 15p. Available from the ERIC Information Analysis Center for Science Education, 1460 West Lane Avenue, Columbus, Ohio 43221.

The principal focus of this newsletter is providing a directory of outdoor education programs in the United States. The information is directed at schools or organizations planning to develop such programs. The entries are listed alphabetically by state. Each entry contains (1) the name of the person to contact for additional information, (2) the address of the project, and (3) a brief description of each project. Also provided are information on (1) the Office of Education publication "Research in Education" (RIE), and (2) the ERIC Document Reproduction Service. (DS)

ED 021 397 MF - $0.25, HC - $1.05

PHYSICAL EDUCATION, SECONDARY SCHOOLS FACILITIES AND BASIC EQUIPMENT 1966.
Massachusetts School Building Assistance Commission, Boston, Massachusetts Association for Health, Physical Education and Recreation, 19p.

Junior and senior high school gymnasiums should be located away from classrooms and near outdoor play areas. Junior high school gymnasiums should be a minimum of 84' x 98' x 22'. Senior high gymnasiums should be at least 90' x 106' x 24'. Areas should be divisible. Provision should be made for basketball, volleyball, badminton, paddle tennis, seating, and teaching areas. Other indoor

areas recommended are space for gymnastics, remedial work, health, and wrestling, and a simulated outdoor area. Special attention should be given to the floor, walls, ceiling, partitions, lighting, locker, shower, drying, towel, team, training and storage rooms, and offices. Outdoor facilities should provide 20 acres plus an additional acre per 100 pupils for junior high pupils, and senior high pupils should have a site of 30 acres plus one acre per 100 pupils. Hardtop areas, tennis courts, and grassy areas should be included. Provisions should be made for interscholastic sports. Outdoor and indoor equipment lists as well as a bibliography are provided. (RH)

ED 021 672 NOT AVAILABLE FROM EDRS

OUTDOOR EDUCATION AREAS AND FACILITIES.
American Association for Health, Physical Education and Recreation, Washington, D.C.; Athletic Institute, Chicago, Ill., 1968, 17p. Available from Athletic Institute, 805 Merchandise Mart, Chicago, Illinois ($7.50); Chapter 15 of "College and University Facilities Guide."

The facilities described for outdoor education and camping areas are designed to be an integral part of the large college or university campus, and to serve the educational and recreational programs of the educational institution and the total community. The establishment of an outdoor resident center is followed from the rationale for site selection and utilization through the planning and organization stages to the construction of the facilities. Specialized facilities for such programs as short-term educational "camps," conferences and workshop centers, outdoor laboratories, one-day recreational programs, and outdoor sports and skill complexes are considered. (SW)

ED 021 683 NOT AVAILABLE FROM EDRS

AN INVESTIGATION OF THE ADMINISTRATIVE PROBLEMS RELATED TO RESIDENT OUTDOOR EDUCATION PROGRAMS IN CERTAIN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS.
Ambry, Edward Joseph, 1964, 152p. Available from Univ. Microfilms, 300 Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 65-1317).

A survey of 90 selected public school districts in the United States was conducted to identify administrative problems unique to the operation of resident outdoor education programs, and to determine which problems were more, less, or equally difficult to resolve than administrative problems encountered in managing usual phases of an educational program. Fifty-nine (85.5 percent) of the 69 returned survey forms were usable, and were tested for statistical significance by the chi-square method at the .10 level of probability. Outdoor education problems in the category of "Staff" were judged to be

most difficult; problems in categories of "Legality," "Finances-Budget," and "Miscellaneous," were judged to be of ordinary difficulty; and problems in the categories of "Curriculum," "Public Relations," and "Board of Education," were judged to be least difficult. (VM)

ED 022 275 MF - $0.25, HC - $1.85

FINAL REPORT OF A DEMONSTRATION PROJECT TO DETERMINE THE FEASIBILITY OF ESTABLISHING AN INFORMATION CENTER--RECREATION FOR THE HANDICAPPED.
Southern Illinois Univ., Carbondale, Vocational Rehabilitation Administration (Dept. of Health, Education and Welfare), Washington, D.C., Report No. RD-1554-G, 1966, 35p.

A 2-year project to establish an information center for collecting, collating, and distributing information on recreation for the handicapped is described. The setting is defined, including the purpose, personnel, and overview of the project; problems associated with establishing the project are discussed. Changes in goals and the production, content, and distribution of a newsletter and fliers on recommended reading, procedures, and programs are described; implications derived from the success and failure of attempted plans are detailed. A summary and recommendations are given. Appendixes include categories used in the field of recreation for the mentally retarded; examples of letters, newsletters, the three fliers; and statistics on requests received. (SN)

ED 022 278 NOT AVAILABLE FROM EDRS

RECREATION FOR RETARDED TEENAGERS AND YOUNG ADULTS.
Carlson, Bernice Wells, and Ginglend, David R., 1968, 316p. Available from Abingdon Press, 201 Eighth Avenue South, Nashville, Tennessee 37202 ($4.95).

Intended for recreational leaders, classroom teachers, volunteers, and parents, the text presents guidelines for planning and conducting activities for mentally retarded youth and young adults. Consideration of understanding the maturing retardate and his social needs includes different kinds of beneficial social experiences, establishing purposes and goals for organized recreation, and areas of development. Discussion of an organized program treats the roles of director, parents, and volunteers; the program structure; and flexibility and growth. Also presented are the following: group activities such as music, games, and parties; special interests in sports, handicraft, nature and hobbies, and homemaking hobbies; and family-centered activities in the community and at home. Supplementary materials listed are 17 periodical articles, 55 books and pamphlets, and 15 sources of continuing information. (DF)

ED 022 354 MF - $0.25, HC - $2.30

A METHOD OF REDUCING CLASSROOM REQUIREMENTS IN PRIMARY SCHOOLS IN ASIA. OCCASIONAL PAPER - SCHOOL BUILDING NO. 13. Srivastava, R. D., and Others, Asian Regional Institute for School Building Research, Colombo (Ceylon), 1967, 44p.

In an attempt to more closely relate the size of primary schools in Uttar Pradesh, India, to the teaching activities, an experiment was conducted in some forty schools where classrooms were provided only for lessons for which covered space was essential. All other lessons were conducted in the open on the school site. An area utilization reduction of about 40% was achieved as well as a side effect of greater student interest due to increased individual activity. Climatic conditions in India were examined and it was concluded that outdoor teaching north of latitude 19 degrees North and below 2,000 feet above mean sea level is quite feasible. (NI)

ED 022 591 MF - $0.50, HC - $4.45

OUTDOOR RECREATION RESEARCH, A REFERENCE CATALOG FOR 1966. Department of the Interior, Washington, D.C., Bureau of Outdoor Recreation; Smithsonian Institution, Washington, D.C., Science Information Exchange, 1967, 87p.

Ongoing research in outdoor recreation during 1966 is identified through brief abstracts of research projects, lists of organizations and principal investigators conducting the research, and a subject index. The four major research areas constituting chapter headings are resources, user studies, economics, and research methods. Related document RC 002 600 provides a similar catalog of information for 1967. Other related documents are ED 022 592 and ED 022 593. (VM)

ED 022 592 MF - $0.75, HC NOT AVAIL.

INDEX TO SELECTED OUTDOOR RECREATION LITERATURE, VOLUME I. Department of the Interior, Washington, D.C., Bureau of Outdoor Recreation; Department of the Interior, Washington, D.C. Library, 1967, 155p. Available from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 ($0.75).

A partial index to selected outdoor recreation literature received by the Department of the Interior Library during 1966 provides 991 abstracts retrievable by subject index, name index, geographic index, and publications appendices. Subject categories include outdoor recreation resources, administration of resources and programs, recreation users' demands and values, and research. A list of journals regularly scanned is included. Related documents are ED 022 591, ED 022 593, and ED 022 594. (VM)

ED 022 593 MF - $1.00, HC NOT AVAIL.

INDEX TO SELECTED OUTDOOR RECREATION LITERATURE, VOLUME II.
Department of the Interior, Washington, D.C., Bureau of Outdoor Recreation; Department of the Interior, Washington, D.C. Library, 1968, 245p. Available from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 ($1.25).

A partial index to selected outdoor recreation literature received by the Department of the Interior Library during late 1966 and the first six months of 1967 provides 847 abstracts which are retrievable by subject, name, and geographic indexes. Subject categories include outdoor recreation resources, administration of resources and programs, recreation users' demands and values, research, history, and philosophy. An appendix of periodicals indexed is included. Related documents are ED 022 591, ED 022 592, and ED 022 594. (VM)

ED 022 594 MF - $0.75, HC - $9.20

OUTDOOR RECREATION RESEARCH, A REFERENCE CATALOG - 1967. NUMBER 2.
Department of the Interior, Washington, D.C., Bureau of Outdoor Recreation; Smithsonian Institution, Washington, D.C., Science Information Exchange, 1968, 182p.

Ongoing research in outdoor recreation during 1967 is identified through brief abstracts of research projects, lists of organizations and principal investigators conducting the research, and a subject index. The four major research areas constituting chapter headings are resources, user studies, economics, and research methods. Related document RC 002 597 provides a similar catalog of information for 1966. Related documents are ED 022 592 and ED 022 593. (VM)

ED 022 600 NOT AVAILABLE FROM EDRS

OUTDOOR EDUCATION. THE CLASSROOM TEACHER SERIES IN HEALTH EDUCATION, PHYSICAL EDUCATION, AND RECREATION, NO. 3.
Smith, Julian W., American Association for Health, Physical Education and Recreation, Washington, D.C., 1964, 34p. Available from NEA Publications-Sales, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 ($0.75).

Outdoor education is presented as a means of curriculum enrichment through experiences in and for the outdoors. Discussion includes the definition and need for outdoor education, enrichment activities in the out-of-doors, outdoor education laboratories, day camp and resident camp programs, and resources for outdoor education. Outdoor school activities are suggested for areas of arithmetic, language arts,

social studies, biological sciences, earth science, health, physical education, arts, crafts, and music. Lists of selected references and films conclude the document. (SW)

ED 022 603 MF - $0.25, HC - $0.30

SELECTED BIBLIOGRAPHY FOR OUTDOOR EDUCATION.
American Association for Health, Physical Education and Recreation, Washington, D.C., 1967, 4p.

Sixty-one books and articles published between 1940 and 1967 are listed. Although the major portion of the bibliography is devoted to outdoor education, also included are publications on recreational activities, conservation, national and state parks, camping, and outdoor crafts. (SW)

ED 022 604 MF - $0.25, HC - $1.20

[FREDERICK COUNTY OUTDOOR SCHOOL SAMPLE FORMS.]
Frederick County Board of Education, Md., 1965, 22p.

The preparations, forms, checklists, parental permission letters, and pre-planning procedures necessary in conducting and participating in an outdoor school program are related. This teacher information material includes: outdoor school staff member's classroom visitation, classroom preparation for the outdoor school, films and materials, post-visitation suggestions, and a teacher's checklist. Examples of letters to parents, counselor's checklist, planning sheets, daily schedules, assignment or duty sheets, weather log, and student question sheets are also included. A related document is ED 022 605. (SW)

ED 022 605 MF - $0.25, HC - $0.80

OUTDOOR EDUCATION, AC[illegible]N MODEL.
Nolan, Hugh B., Frederick County Board of Education, Md., 1967, 14p.

An outdoor education program is described which has the philosophy that a direct experience is better than a vicarious one, and that the efficiency of education is increased in direct proportion to the amount of direct experience. An historical background which included pilot programs and experimental programs is discussed. Facilities, philosophy of the outdoor school, staff, program costs, staff role, and related developments are also considered. Illustrations and long-range plans conclude the document. A related document is ED 022 604. (SW)

ED 022 611 NOT AVAILABLE FROM EDRS

KINGDOM OF THE TIDES.
Carter, Samuel, III, 1966, 160p. Available from Hawthorn Books, Inc., 70 Fifth Avenue, New York, N.Y. 10011 ($3.95).

Areas of discussion are the history of tides, the forces which exert an influence upon the earth's tides, the behavior of tides as modified by terrestrial features, "freak" behavior of tides, the marine life which inhabits tidal areas, the manner in which tides have helped to shape the course of history, how tides affect our lives on a day to day basis, and the possible future benefits to mankind which might be derived from the tides. Also included are: information concerning early theories about the tides; a discussion of Newton's theories of gravity; the influence of the moon and sun on the earth's tides; a discussion of tidal oscillations, ocean basins, the three principal types of tides, and information about charting and predicting tides; a discussion of tidal waves, tidal surges, tidal bores and reversing falls, whirlpools, and rip tides; and commercial aspects associated with the tides, including ocean farming and ocean mining. (VM)

ED 022 616 NOT AVAILABLE FROM EDRS

ECONOMICS OF OUTDOOR RECREATION.
Clawson, Marion, and Knetsch, Jack L., Resources for the Future, Inc., Washington, D.C.; Ford Foundation, New York, N.Y., 1966, 348p. Available from The Johns Hopkins Press, Baltimore, Maryland 21218 ($8.50).

Written for the purposes of presenting an overview of outdoor recreation in the United States and defining the significant outdoor recreation policy issues of the next 10 to 20 years, this document also includes major sections on recreation resources and economic considerations. Projections to the year 2000 are made for a national time budget, time divisions of leisure, and estimates of outdoor recreation use. Also presented is information about preservation of recreation quality, existing recreational areas, the role of education in developing conservation habits, the value of land and water resources when used for recreation, pricing and paying for public outdoor recreation facilities, and other major issues of public policy. (VM)

ED 023 267 NOT AVAILABLE FROM EDRS

SCHOOLS CAN BE GREEN ISLANDS.
Wilson, Russell E., and Brown, June S., 1965, 3p. Reprint from Michigan Education Journal, April 1965, p. 20-22. Available from Michigan Education Association, Box 673, Lansing, Michigan 48903.

Site development is approached from a non-traditional view. Utilization of the natural resources of the site location for instructional programs, broad community use, and increased neighborhood values are discussed. Opportunities for enhanced instructional programs include conservation education, botany, forestry, and geology. Planning suggestions and a checklist of federal, state, and private funding and assistance sources in acquiring and developing school sites are provided. The school site is viewed as a long term public resource investment, and recreationally developed school sites of at least 15 acres are recommended as the most economical investments in the long run. (FO)

ED 023 490 NOT AVAILABLE FROM EDRS

THE SCOPE OF OUTDOOR EDUCATION.
Smith, Julian W., 1960, 6p. Journal citation: Bulletin of the National Association of Secondary-School Principals; v44 n256 p157-9 May 1960.

Outdoor education represents a practical and sound approach in the achievement of accepted educational objectives through the utilization of current resources available to the learning process, and not the addition of another discipline to the curriculum. One of the most sensational and successful programs of outdoor education has been the introduction of school camping through the utilization of existing resources. These outings commonly last a week and cover a wide variety of instructional units from physical education to the social sciences. Another use of outdoor resources has been the establishment of laboratories in the out of doors, covering a wide range of instructional units from the physical sciences, physical education, social sciences, and English. (DK)

ED 023 491 NOT AVAILABLE FROM EDRS

PROGRAM, FACILITIES, AND LEADERSHIP FOR OUTDOOR EDUCATION.
Smith, Julian W., 1960, 7p. Journal citation: Bulletin of the National Association of Secondary-School Principals; v44 n256 p159-65 May 1960.

Since outdoor education programs cut across many curricular areas, the administrators of these programs encounter problems different from

those found in specific subject matter areas. As aids in overcoming these problems, suggestions are given for program procedures; procurement of facilities, equipment, and supplies; and leadership training. Descriptions of national outdoor education resource programs, their activities, and their addresses are provided. (DK)

ED 023 493 NOT AVAILABLE FROM EDRS

OUTDOOR EDUCATION - A DEVELOPMENT IN CURRICULUM.
Smith, Julian W., 1966, 4p. Journal citation:
Michigan School Board Journal; Oct.1966.

Outdoor education is discussed as a means of enriching and enhancing the interdisciplinary curriculum. Topics covered include urbanization effects, patterns of outdoor education, planning for outdoor education, Federal programs, teacher and leadership preparation, and consultant resources. The document concludes by pointing to planning as the beginning step in outdoor education development. (SW)

ED 023 495 MF - $0.75, HC - $7.70

NEW JERSEY OPEN SPACE POLICY PLAN.
New Jersey State Dept. of Community Affairs, Trenton, Dept. of Housing and Urban Development, Washington, D.C., 1967, 152p.

An Open Space Policy Plan was developed for the State of New Jersey to provide an adequate blueprint for preserving open space and creating a desirable recreational environment in the State in anticipation of expected increases in population and urbanization. Consideration was given to local, county, State, and Federal responsibilities in the development of an open space statewide program. Emphasis was placed on the priority for open space planning and acquisition in the northern half of the State because of an already existing deficit in open space acreage in that area. Plans for both the 10 and 20 million levels of population were considered. In effect, the Open Space Policy Plan was designed to make future open space easily accessible by locating it in close proximity to potential and already existing urbanizing areas of the State. (VM)

ED 023 503 NOT AVAILABLE FROM EDRS

CAMPING AND OUTDOOR EDUCATION.
Bucher, Charles A., 1968, 16p. Chapter 10 of Foundations of Physical Education. Available from The C. V. Mosby Co., St. Louis, Missouri 63166 ($8.90).

Outdoor education has become an integral part of the curriculum in a number of schools across the nation. Outdoor education activities

can be readily integrated into physical education, recreation, and adult education programs, as well as science, mathematics, and related fields. Camping and outdoor education should become a part of each child's school experience since they can contribute significantly to his intellectual development. It is recommended that institutions of higher learning, especially teacher training institutions, provide more actual experience in the outdoors, and provide added professional preparation opportunities through course offerings in camp administration, crafts, guidance, and actual camp supervision experience. An interdisciplinary approach is an ideal way to prepare leaders for outdoor education. (DA)

ED 023 513 NOT AVAILABLE FROM EDRS

A LEADER'S GUIDE TO NATURE-ORIENTED ACTIVITIES.
van der Smissen, Betty, and Goering, Oswald H., 1965, 232p.
Available from Iowa State University Press, Ames, Iowa 50010 ($2.95).

Nature-oriented activities, including all indoor and outdoor experiences related to the use, understanding, or appreciation of the natural environment, are developed in this document. Topics discussed include program development and organization. Activities are outlined for nature crafts and games, outdoor living skills, projects and hobbies, outing sports, and recreational activities. Extensive references are listed throughout the document. (SW)

ED 023 516 NOT AVAILABLE FROM EDRS

EDUCATION IN AND FOR THE OUTDOORS. REPORT OF THE NATIONAL CONFERENCE ON OUTDOOR EDUCATION (KELLOGG GULL LAKE BIOLOGICAL STATION, HICKORY CORNERS, MICHIGAN, MAY 2-4, 1962).
American Association for Health, Physical Education and Recreation, Washington, D.C.; Edward C. Hough and Mary Hough Kimble Foundation; Michigan State Univ., East Lansing, 1963, 97p. Available from American Association for Health, Physical Education and Recreation, 1201 16th St., N.W., Washington, D.C. 20036 ($2.00).

The two broad aspects of outdoor education considered in this document are education in the outdoors, using the natural environment as a laboratory for learning, and education for the outdoors, with a focus on teaching skills and appreciations for outdoor recreation. Conference procedures, keynote addresses, current practices, contributions to general education, and directions for the future are reported. Recommendations are presented for 6 discussion areas: (1) teacher and leadership preparation; (2) facilities and resources; (3) school camping; (4) older youth work-learn camps; (5) curriculum and programs; and (6) research and evaluation. Responses to an

individual judgment census and an appendix, which contains a copy of the program, and a list of the planning committee and participants, conclude the document. (SW)

ED 023 519 MF - $0.25, HC - $1.65

FACTORS RELATED TO COMMUNICATION OF FOREST FIRE PREVENTION MESSAGES, A STUDY OF SELECTED RURAL COMMUNITIES.
Griessman, B. Eugene, and Bertrand, Alvin L., Department of Agriculture, Washington, D.C., Forest Service; Louisiana State University and A and M Coll. System, Baton Rouge, 1967, 31p.

Two rural Louisiana communities were selected to evaluate the effectiveness of certain types of communication in preventing man-caused forest fires. The communities were selected on the basis of differences in fire occurrence rates and other factors related to conservation. Questionnaires and personal interviews were utilized to determine views of inhabitants and access to communication media. The relation of sociocultural factors to fire occurrence rates, the social process of communication, the potential of mass media and informal media in communication of fire prevention messages, and selective perception and effectiveness of fire prevention messages were evaluated. It was recommended that persons with roles as fire prevention change agents design their information programs to reach all the inhabitants of a community after careful appraisal of all available data on local environmental factors. (SW)

ED 024 484 MF - $0.75, HC - $9.50

OUTDOOR EDUCATION CURRICULUM GUIDE, GRADE 6.
Jefferson County Public Schools, Lakewood, Colo., 1963, 188p.

As developed for a 6th grade outdoor education program, this curriculum guide is organized around a common core designed to teach conservation and appreciation of natural resources. Program initiation, methods and procedures, information on natural resources, suggested time schedules, learning activities, nature hikes, and field trips are discussed to familiarize the teacher with the program. Maps, charts, and illustrations add detail to the narrative, explaining the outdoor laboratory school. Supporting programs in astronomy, art, health and safety, weather, recreation, and various work projects are designed to add enrichment to the basic core. Rules for students, letters to parents, materials and equipment lists, and various forms utilized are contained in the Appendix. (SW)

ED 024 496 MF - $0.25, HC - $1.55

MESA PUBLIC SCHOOLS PROJECT ALPINE: OUTDOOR EDUCATION PROGRAM FOR EDUCATIONALLY DEPRIVED.
Center for Educational Advancement, Mesa, Ariz.; Mesa Public Schools, Ariz., 1968, 29p.

Purposes and objectives are set forth for this outdoor education program designed to concentrate on the educationally disadvantaged. Selection procedures, letters and forms utilized, and daily schedules are included. Segments of the program evaluated are nature studies, nature crafts, food preparation and clean-up, recreation, budget, and counselor instruction. A summary concludes the document. (SW)

ED 024 506 NOT AVAILABLE FROM EDRS

CONSERVATION--IN THE PEOPLE'S HANDS.
Foster, A. B., and Others, American Association of School Administrators, Washington, D.C., 1964, 330p. Available from American Association of School Administrators, 1201 Sixteenth Street, N.W., Washington, D.C. 20036 ($6.00).

Because of increasing population and industrialization and decreasing supplies of natural resources, the need for sound conservation practices has become paramount, particularly within the last decade. In addition, the process of urbanization has limited the contacts large numbers of children have with the outdoors. Education must assume a leadership role in teaching children the wise use and careful management of remaining resources. To foster an appreciation for nature and the value of resources free from pollution and the destructive practices man has exercised in the past (such as indiscriminate deforestation and uncontrolled strip mining), schools should establish outdoor education programs. In addition to their conservation aims, outdoor education programs, conservation education programs, and school farm programs are especially useful in decreasing the number of dropouts and stimulating the interest of the slow or unmotivated learner. (DA)

ED 024 603 MF - $0.50, HC - $3.95

NATIONAL LISTING OF ENVIRONMENTAL AND OUTDOOR EDUCATION PROJECTS. PROJECTS TO ADVANCE CREATIVITY IN EDUCATION, TITLE III, ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965.
Ambry, Edward J., New Jersey State Council for Environmental Education, Mountain Lakes, 1968, 77p.

This listing of projects includes those environmental and outdoor education projects which were funded under Title III of the Elementary and Secondary Act of 1965. The types of programs listed are in-service, on-school-site, day center, and resident programs.

Information concerning the director of the project, the school district and schools served, and the number and types of students involved is provided. Information concerning facilities, funds, objectives, and outcomes is also discussed. An appendix of listings of programs in other states is also provided. (BC)

ED 025 071 MF - $0.75, HC NOT AVAIL.

PROGRAMING FOR THE MENTALLY RETARDED, REPORT OF A NATIONAL CONFERENCE (WASHINGTON, D.C., OCTOBER 31-NOVEMBER 2, 1966).
Project on Recreation and Fitness for the Mentally Retarded, Washington, D.C., 1968, 144p. Available from American Association for Health, Physical Education and Recreation, NEA, 1201 16th Street, Washington, D.C. 20036 ($3.00).

Papers and presentations on physical education and recreation for the mentally retarded consider programs in Norway, the importance of physical activity, the physical educator as a member of the special education team, and the team approach in programing. The following are also treated: recreation and day care for the severely retarded in a community setting, a community recreation team approach to programing, play facilities and equipment, a program of developmental motor activities, support for recreation programs, and physical education programs. Additional information is provided concerning financial assistance and resource material available from the U.S. Office of Education, preparation of grant proposals, and comprehensive state planning in mental retardation. The role of motor activities in programs for retarded and educationally handicapped children is assessed, as are community/residential facility cooperation, recreation planning for retarded adults, scouting, recreation for the severely and profoundly retarded, sex education, and the challenge to action. Reactions, questions and answers, and group and special interest discussions are included. (JD)

ED 025 082 NOT AVAILABLE FROM EDRS

EASTER SEAL GUIDE TO SPECIAL CAMPING PROGRAMS.
Crane, Helen B., Ed., National Easter Seal Society for Crippled Children and Adults, Chicago, Ill. Task Force on Special Camping, 1968, 106p. Available from The National Easter Seal Society for Crippled Children and Adults, 2023 West Ogden Avenue, Chicago, Illinois 60612 ($1.50).

Intended for organizations having or planning to establish resident camping programs for people with special needs, this guide supplements the American Camping Association's Standards. The philosophy,

aims, and objectives of specialized camping programs are considered, and the following are discussed: administration, camp site selection, legal matters, insurance, budget and finance, buildings and facilities, admission and followup procedures, personnel, health and safety, and programing and activities. The appendix includes samples of forms and records used in special camping programs and standards specified by the United States of America Standards Institute for making buildings and facilities accessible to and usable by the physically handicapped. A 33-item annotated bibliography and a list of national organizations and their addresses are also included. (LE)

ED 025 816 MF - $0.50, HC - $5.35

PUBLIC RECREATION AND THE NEGRO, A STUDY OF PARTICIPATION AND ADMINISTRATIVE PRACTICES.
Kraus, Richard, Center for Urban Education, New York, N.Y., 1968, 105p. Available from Center for Urban Education, 105 Madison Avenue, New York, New York 10016 ($0.25).

This study is concerned with the participation by Negroes in public recreation programs in 24 suburban communities in New York, New Jersey, and Connecticut, and the five boroughs of New York City. It is a broadly descriptive study of the activities in which Negroes of all ages participate, as well as of administrative practices and problems surrounding their participation, as seen by the white recreation administrators. Negroes tend to dominate track and field, swimming, basketball, and boxing; whites dominate tennis, golf, and archery. Social class distinctions blur the racial distinctions throughout the study. Negroes are strong in some music, drama, and dance but are only lightly represented in programs for the handicapped. They use inexpensive and unstructured facilities over and above the more costly. Young Negroes far outnumber adolescents and adults. Teams and groups are nearly all segregated unless intentionally integrated. White withdrawal often accompanies Negro participation. (BP)

ED 025 868 NOT AVAILABLE FROM EDRS

SCOUTING FOR THE MENTALLY RETARDED.
Boy Scouts of America, New Brunswick, N.J., 1967, 43p.
Available from Boy Scouts of America, New Brunswick, New Jersey 08903.

The handbook for leaders discusses ways in which scouting helps and how the unit serves the boys. Advancement, rank, and the boys are discussed; boy scout tests (tenderfoot and second class interpretation for mentally retarded boys), group activities, and a sample ceremony are detailed. Listings are given of membership provisions, helps for leaders, 20 scout publications, and 23 references. (LE)

ED 026 980 MF - $0.50, HC - $4.45

A MODEL OPTION OF COURSES FOR INSTRUCTION IN WILDLAND RECREATION MANAGEMENT AT THE COLLEGE UNDERGRADUATE LEVEL.
Bury, Richard L., Northern Arizona Univ., Flagstaff, Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., Bureau of Research, 1968, 87p.

Recreational use of wildland is growing rapidly and forms a major portion of the manager's job. About one-third of today's forestry students will be employed by land management agencies or by companies committed to the multiple-use concept. Education, course materials, and the supply of forest management graduates have lagged considerably behind needs, and the demand for published information on managerial skills and for qualified personnel is increasing. To help meet these needs, this report contains information on the current and expected nature of the recreation management job on the western national forests; judgments of recreation managers on educational deficiencies of forestry graduates and recommendations for changes in forestry education; basic philosophies of education and recreation management accepted as guides in course development; a general framework for the technical content of a course in wildland recreation management; and a group of 4 courses geared to the above factors. The proposed courses should provide educators with a useful source for preparing their own courses in recreation management within the multiple-use context. Four categories of literature were reviewed and utilized in implementing the project: methods of research in education, methods of job analysis, theory of education and curriculum development, technical components and education in wildland recreation management. Additional course recommendations are expected to appear in 1969 as a publication of the Texas Agricultural Experiment Station. (JS)

ED 027 119 MF - $0.25, HC - $1.50

CAMPING FOR DISADVANTAGED YOUTH, AN INFORMAL EDUCATIONAL APPROACH.
Word, Ulyss G., Arkansas Univ., Fayetteville, Agricultural Extension Service, Department of Agriculture, Washington, D.C., Federal Extension Service, 1968, 28p. Also available from Extension Executive Assistant, P.O. Box 391, Little Rock, Arkansas 72203 (MP 103).

The document provides a summary of special 4-H summer camps for disadvantaged youth in Arkansas. The camping experience in which the participants overcome inadequacies in social skills, self-discipline, self-confidence, and self-assurance is described. Major emphasis is given to the development of socialization skills and to health- and hygiene-related activities. Procedures followed in selecting participants, establishing camp procedures, and program activities are discussed. An extensive evaluation based on 3 years of summer camps is included. (JM)

ED 027 127 MF - $0.50, HC - $4.55

TEACHERS' GUIDE TO OUTDOOR EDUCATION, GRADE VI.
Fox, Denver C., San Diego City Schools, Calif., 1966, 89p. Also available from San Diego City Schools, Education Center, Park and El Cajon Boulevard, San Diego, Calif. 92103 (Stock No. 41-C-0900. $1.25).

The aim of this guide is to aid sixth-grade teachers whose classes participate in the San Diego City and County outdoor education programs. The guide enables the teacher to improve the quality of outdoor education through suggestions for better planning and preparation procedures for the camping experience and for more active student participation during the encampment itself. Ways and means are enumerated by which the outdoor education experience may be extended to add vitality, understanding, and new interests to the regular classroom instructional program. The utilization of a "camp kit," consisting of pictures, maps, pamphlets, and books, in preparation for the outdoor experience is also described. A related document is ED 027 991. (DA)

ED 027 221 MF - $0.50, HC NOT AVAIL.

OPERATION WARD'S ISLAND, A GUIDE TO THE TREES AND OTHER FEATURES OF WARD'S ISLAND.
New York City Board of Education, Brooklyn, N.Y., Bureau of Curriculum Development; Office of Economic Opportunity, Washington, D.C., 1968, 71p. Available from New York Board of Education, Publications Sales Office, 110 Livingston Street, Brooklyn, New York 11201 ($2.00).

This guide for teachers, students, and adults illustrates how it is possible to use Ward's Island as an outdoor laboratory. It contains a guide to 30 kinds of trees on the island, along with clearly drawn maps and illustrations. The guide helps the user to locate these trees along two nature trails. A section called "Ward's Island Roundup" briefly discusses some of the rich history of the island which was once the home of the Merechkawick Indians, sold by the Indians to the Dutch governor of the New Netherlands settlement in 1637, controlled by the British thirty years later and used as a military camp during the Revolutionary War. This island's flowers, weeds, rocks, natural and man-made geography are described. A section is also devoted to consideration of the island's future. (BC)

ED 027 590 MF - $0.25, HC - $1.80

THE COLLEGE UNION OUTDOORS. COLLEGE UNIONS AT WORK.
Crabb, Theodore, Association of College Unions, Ithaca, N.Y., 1965, 39p. Also available from Association of College Unions--International, Willard Straight Hall, Cornell University, Ithaca, New York 14850 ($1.00).

This publication, one in a series of monographs on college unions, focuses on the outing-informal recreational activity taking place

out-of-doors, usually undertaken by students in groups, and usually noncompetitive, a natural extension of the student union program. Main sections of the monograph include: (1) a suggestion for a basic program, (2) organizing the program, (3) equipment necessary, (4) desirable headquarters facility, (5) types of instructional programs, (6) safety considerations, (7) problem areas, (8) deterrents to the establishment and maintenance of an outing program, and (9) a concluding statement. Appendices include sample programs, program guides, and safety codes. (BP)

ED 027 709 MF - $0.25, HC - $1.95

SUGGESTED ORDINANCE AND REGULATIONS COVERING PUBLIC SWIMMING POOLS.
American Public Health Association, Inc., New York, N.Y., 1964, 37p.

In preparing this publication, the Joint Committee on Swimming Pools and Bathing Places intended to promote the proper installation of public swimming pool facilities and their efficient operation. Objectives were--(1) to be concerned with the development of realistic and reasonable minimum standards to safeguard the health and safety of swimmers and bathers, (2) to develop standards that had some degree of flexibility, and (3) to produce a legal instrument that could be used as a guide by government in exacting minimum swimming pool standards. This ordinance and these regulations, if enacted, should serve to minimize the spread of infections, reduce injuries through elimination of hazards, and promote public swimming pools as attractive and safe places for enjoyment, recreation, and physical fitness. While this report is in the form of suggested legislation, it is also a guide and may be used in the evaluation of the design, construction, operation and maintenance of public swimming pools. (RK)

ED 027 983 MF - $0.25, HC - $1.35

ALBUQUERQUE PUBLIC SCHOOLS TEACHER'S GUIDE TO OUTDOOR EDUCATION.
Albuquerque Public Schools, N. Mex., Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., Div. of Plans and Supplementary Centers, 1968, 25p.

Preparation of teachers and students for their one-day trip to the Albuquerque Public Schools' Outdoor Education Center is outlined. Topics covered include: orientation program; general preparation considerations; course of study; map of site; vocabulary; activity evaluation sheet; and a supplementary book list. Geology, biology, safety procedures, time schedules, supplies, Board of Education Policy, and follow-up activities are among the items discussed. (SW)

ED 027 991 MF - $1.00, HC - $13.15

OUTDOOR EDUCATION: A GUIDE TO THE INSTRUCTIONAL PROGRAM AT THE SIXTH-GRADE SCHOOL CAMPS.
Fox, Denver C., San Diego City Schools, Calif., 1966, 261p.
Also available from San Diego City Schools, Education Center, Park and El Cajon Boulevard, San Diego, California 92103 (Stock No. 41-C-1200, $3.00).

The outdoor education program for sixth graders in San Diego County is described, along with an account of its development and the financial support structure underlying the program. Eleven major outcomes that can be expected from participation in the outdoor education program are enumerated. An intensive pre-camp teacher-training program carried on at camp is summarized. The instruction guide contains detailed information about all learning activities (democratic living in a camp setting, safety and health practices, outdoor science activities, conservation, and creative expression) in which children of the San Diego district participate during their camp experience. A glossary of technical terms used in the discussion of programs and practices at the camps is included. A related document is ED 027 127. (DA)

ED 028 086 MF - $1.00, HC - $12.85

A CLASSROOM TEACHING AND RESOURCE GUIDE IN CONSERVATION EDUCATION.
Barnhart, William M., Naturealm, Duncansville, Pa., Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., Bureau of Elementary and Secondary Education, 1968, 255p.

In this teaching guide the natural and social sciences are integrated with an emphasis on conservation and ecology. The guide contains ten teaching units dealing with various physical and biological aspects of the environment. Unit one deals with the question of what is conservation. Unit two is concerned with the question of what is a natural resource. Units three through nine deal respectively with energy, minerals, soil, water, air, plants, and animals. Unit ten is entitled, "Human Resources." There are more activities and information in the guide than one teacher could use with a given class, leaving the decision as to which material to use with the teacher. Each unit is self-contained and may be used independently of the others. A bibliography of learning materials is included with each unit, and a bibliography of free and inexpensive materials appends the guide. This work was prepared under an ESEA Title III contract. (BC)

ED 028 478 MF - $0.25, HC - $2.45

THE UNION RECREATION AREA. COLLEGE UNIONS AT WORK.
Stevens, George F., Association of College Unions--International, Ithaca, N.Y., 1965, 47p. Also available from Association of College Unions--International, Willard Straight Hall, Cornell University, Ithaca, New York 14850 ($1.00).

Within the context of college union programs, the recreational games of bowling, billiards, table tennis, and some table games are discussed, including their history, facilities, and operation. Specific duties and responsibilities of the Recreation Area Manager are outlined, as are counter personnel and procedures, and maintenance personnel and procedures. There is a checklist of arrangements for planning and conducting tournaments. Included in the appendix are: amateur standing policy, materials for game promotion, director of games associations, key bowling lane dimensions, billiard table specifications, table tennis-table specifications, and regions of the Association of College Unions--International. (KP)

ED 028 855 MF - $0.50, HC - $3.50

DESCRIPTIVE EVALUATION REPORT OF DIVERSIFIED OUTDOOR EDUCATION.
Rockingham County School System, Wentworth, N.C., Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., 1968, 68p.

A diversified outdoor education project under Title III, Elementary and Secondary Education Act of 1965, was started in June 1967 in Rockingham County, North Carolina. Objectives, activities, and student performance in the 3 phases of the program were evaluated through September 1968. A combined outdoor education and corrective reading program consisted of structured and nonstructured reading experiences revolving around individual interests and needs. A resident camp program for mentally retarded youth provided 24-hour supervision and instruction in communication skills, physical development skills, self-help skills, social behavior skills, and practical work skills. The third program within the project involved conservation and nature studies through actual examples and experiences. (JH)

ED 028 862 MF - $0.50, HC - $4.00

FEASIBILITY STUDY OF RESOURCE-USE, OUTDOOR EDUCATION CENTER, TAYLOR COUNTY, FLORIDA.
Master Enterprises, Athens, Ga., Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., 1966, 78p.

Extensive planning in relation to the establishment of an outdoor education center in the State of Florida is reported. The

proposed outdoor education center, designed to enrich the public school program of instruction in such fields as conservation, recreation, and resource-use, is outlined. The report contains an account of socioeconomic conditions, a detailed description of the site, program descriptions, organization and administration information, a description of facilities, an illustrated site plan, a complete set of construction and operating budgets for 3 years of operation, and a philosophy of evaluation. The appendix includes a report on the history of middle Florida, a basic bibliography of teaching materials, a list of schools eligible to participate in the project, and a list of organizations and agencies which could provide assistance to the project. This publication is funded by Title III of the Elementary and Secondary Education Act of 1965. (SW)

ED 028 938 NOT AVAILABLE FROM EDRS

A DESIRABLE OUTDOOR EDUCATION PROGRAM FOR ADULT EDUCATION CENTERS.
Ferris, David Louis, Indiana Univ., Bloomington, 1968, 196p.
Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 68-17263, Microfilm $3.00, Xerography $9.00).

An attempt was made in this investigation (1) to survey the status of existing outdoor education programs for adults and (2) to work with a jury of experts to report elements of an effective outdoor education program for adults in the future. Participants included (1) the directors of 76 adult education centers in cities of 25,000 to 100,000 and (2) a group of 12 nationally known authorities in outdoor education. Questionnaires were used for obtaining data. Concluded were that (1) there is a growing interest in outdoor education for adults, (2) the purposes, objectives, and outcomes selected by all respondents provide an adequate and desirable guide for establishing an outdoor education program for adults, and (3) adult education directors appear to be sincerely interested in improving and extending the educational opportunities available in their communities through providing outdoor education courses. (DS)

ED 029 483 MF - $0.25, HC - $1.70

NATURE CENTERS AND OUTDOOR EDUCATION FACILITIES.
National Audubon Society, New York, N.Y., 1968, 32p.
Available from National Audubon Society, Nature Centers Division, 1130 Fifth Avenue, New York, N.Y. 10028 ($1.00).

The objective in the compilation of the information is to reach individuals, groups or clubs devoted to conservation who may wish to visit nature centers in their vicinity. In addition, school officials

contemplating outdoor education projects for their students are made aware of the location of successful, full-time programs. This list is an encouragement to the conservation-minded as evidence of the accomplishments in community nature center planning, and can be used by schools and colleges as a source of reference for information on outdoor education programs. (RK)

ED 030 289 NOT AVAILABLE FROM EDRS

A NATURE CENTER FOR YOUR COMMUNITY.
Shomon, Joseph J., National Audubon Society, New York, N.Y., 1962, 44p. Available from Nature Centers Division, National Audubon Society, 1130 Fifth Avenue, New York, N.Y. 10028 ($1.00).

A nature center is an outdoor education area: a parcel of natural land where people, particularly the young, and nature can meet. It can be an educational section of a state or national forest or park set aside specifically to serve the people of one or several nearby communities. These centers usually include an educational or interpretive building with appropriate displays and teaching aids, nature and conservation education trails, managed ponds, lakes or streams, plantations, demonstrations of soil and water conservation practices, wildlife food plantings, observation towers, weather station, habitat study areas, and many other educational features. Three principal elements make up a nature center--(1) land, (2) buildings and other man-made features, and (3) people. A nature center can be established through a process of logical development, phases being individual or group interest, formation of steering committees, organized community groups, planning committees of land use and building construction, acquisition of land, staffing, developing educational facilities, and educational use of the area by the people or certain interested groups in the community. (RH)

ED 030 504 NOT AVAILABLE FROM EDRS

WILDERNESS ROAD.
Loughmiller, Campbell, Hogg Foundation for Mental Health, Austin, Texas, 1965, 151p. Available from Hogg Foundation for Mental Health, Univ. of Texas, Austin, Texas 78712.

The benefits of outdoor camping for disturbed boys whose difficulties require treatment outside the home are described. The variety of emotional handicaps handled by group technique and direct experience with natural surroundings at Camp Woodland Springs outside of Dallas, Texas, and the reactions of the boys participating in this residential program, are elaborated. The camp has operated for over 40 years and has worked with more than 600 boys; this book

deals with the last 18 years during which boys have been accepted on a year-round basis. Discussion includes a program description, handling of educational experiences through democratic living and self responsibility, group structure and process, therapy, counselor selection and training, role of the parents, caseworker and sponsor, evaluation, and follow-up procedures. Actual experiences encountered and mastered by individual boys with different backgrounds are related to illustrate the effects of the camp environment and techniques utilized. (SW)

ED 030 529 MF - $0.50, HC - $5.90

OUTDOOR EDUCATION PROJECT REPORT, CAMP ALPINE.
Palmer, N.J., Mesa Public Schools, Ariz., Center for Educational Advancement, Mesa, Ariz., 1969, 116p.

A report is given of Project Alpine, two summer pilot programs in outdoor education sponsored by the Mesa Public Schools of Arizona. The report outlines the duties of camp personnel and includes an instruction sheet used by camp counselors. Various activities held for the campers (boys and girls from both upper elementary and secondary grades) are described including: (1) nature crafts, such as spatter painting and rock painting; (2) structured and unstructured recreational programs; (3) science education through problem solving using the discovery-inquiry method; and (4) trailing, tracking, and stalking. (RH)

ED 030 797 MF - $0.50, HC - $4.80

THE COLLEGE, THE COMMUNITY AND CONSERVATION. REPORT OF A CONFERENCE (WASHINGTON, D.C., MAY 22-23, 1967).
Conservation Foundation, Washington, D.C., 1967, 94p.
Also available from The Conservation Foundation, 1250 Connecticut Ave., Washington, D.C. 20036 ($1.00).

A conference on conservation education brought together leaders in college and university sponsored continuing education, professionals in conservation, planning, and design, and representatives of public and private organizations; discussion centered on the acceleration of application of now known and feasible methods to the management of land, water, and air. Public agency assistance is available at the federal level in such programs as The Model Cities; at the state and regional level, by planning departments as well as resource agencies; and through action guides published by the National Association of Counties. Leaders, professionals, and organizations may need instruction and guidance but they can make contributions to the preparation and execution of Title I projects. To obtain federal support, one must have a strong program, supporting data, strong grass roots support particularly of those of high position,

geographically distributed support, and proper timing. (Included are discussions on community responses, university faculty and administration attitudes, budgeting and project development, curriculum materials, and a special audiovisual approach; a bibliography and list of catalogs; and brief summaries of Title I and related projects.) (EB)

ED 030 991 MF - $0.25, HC - $2.50

A SUMMER SCHOOL OUTDOOR EDUCATIONAL PROGRAM FOR CULTURALLY DISADVANTAGED EDUCABLE MENTALLY RETARDED CHILDREN. STATUS REPORT.
Brown, Louis F., and Andrews, James B., Iowa Univ., Iowa City, Office of Education (Dept. of Health, Education and Welfare), Washington, D.C., 1968, 48p.

Fourteen culturally deprived educable mentally handicapped children (ages 126 to 168 months, IQ's 52 to 86) participated in a 7-week project to determine the effectiveness of correlating classroom instruction with camping and outdoor educational activities. The subjects were first tested for current knowledge and attitudes about science, recreational camping, and themselves; they also received instruction in homemaking, science, and camping. Then the subjects practiced on campsite what they had learned in the classroom. Finally they were evaluated by the same instruments as earlier and were given opportunity to react to the camping experience. It was concluded that the activities offered will not replace those of physical education programs and that the experiences gained and the subjects' ease in verbalizing seemed to enhance their self concept and family status. A significant change in the positive direction was noted in the subjects' concept of the magnitude of their problems in reading, health, and personal adjustment; their knowledge of natural science also showed a significant gain. No significant changes occurred in group status, although there was some shifting of children in the middle of the sociogrammetric region. Recreational activity preferences were altered, although not significantly in favor of those offered. (JD)

ED 031 011 MF- $0.25, HC NOT AVAIL.

OUTDOOR RECREATION PLANNING FOR THE HANDICAPPED. BUREAU OF OUTDOOR RECREATION TECHNICAL ASSISTANCE BULLETIN.
Department of the Interior, Washington, D.C., Bureau of Outdoor Recreation; National Recreation and Park Association, Washington, D.C., 1967, 43p. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 ($0.40).

The requirement that the handicapped be given special consideration as prerequisite to state participation in the Land and Water

Conservation Fund Program is stated, and the following groups of handicapped are specified: the physically, visually, and aurally handicapped, and those persons with special health problems; the mentally retarded; the emotionally disturbed; and the multiply handicapped. Their limitations and what can be done to compensate for them are discussed. Modification of playgrounds and facilities and equipment for swimming, camping, fishing, and boating is described; national, state, and private agencies in several areas which can help are mentioned and their addresses are given. Case histories are provided of a self guiding nature trail in Aspen, Colorado, camping in San Francisco, California, and adaptation of recreation facilities in New York State (including park planning, access, toilet facilities, swimming pools, picnic areas, play areas, and miscellaneous facilities). Sixty-four references are cited. (JD)

ED 031 335 MF - $0.50, HC NOT AVAIL.

[COLORADO OUTWARD BOUND SCHOOL. REPORT OF THE DIRECTOR, 1968.]
Nold, Joseph J., Colorado Outward Bound School, Denver, 1968, 66p.

The Colorado Outward Bound School has continued its traditional program of providing leadership students of high caliber with stress and success experiences in an outdoor environment which are designed to facilitate personal growth in each student. The activities on expeditions are planned so that each individual is confronted in a way that maximizes this growth and forces him to develop in areas of need. The special programs developed by the school in cooperation with other agencies (industrial and social) follow the same format, with the emphasis that the experiences gained through the program are catalytic to the agencies' follow-up programs. The special programs enrolling 765 students in 1968 were aimed at the hard core unemployed, the urban disadvantaged, school underachievers, and college freshman orientation. The report reports on each of the summer courses and model programs, and a brief vita describing each of the 41 staff members. Also included are various statistics concerning an enrollment breakdown, quotes from student journals, the 1969 course schedule, and a reprint of "Outward Bound: Education Unlimited," by Gary Templin. [Not available in hard copy due to marginal legibility of original document.] (DK)

ED 031 338 MF - $0.25, HC - $1.40

OUTWARD BOUND.
Outward Bound, Inc., Andover, Mass., 1968, 26p.

The Outward Bound concept was developed in Germany and Great Britain with the saving of human life as the ultimate goal. Courses

are designed to help students discover their true physical and mental limits through development of skills including emergency medical aid, firefighting, search and rescue, mountaineering, and sailing. Five Outward Bound schools currently in operation in the United States are described and typical programs for each are outlined on a daily basis. (JH)

ED 031 339 MF - $0.25, HC - $0.50

OUTWARD BOUND...INTO THE MAINSTREAM OF EDUCATION.
Outward Bound, Inc., Andover, Mass., 1968, 8p.

Outward Bound schools have instituted advanced courses designed specifically for adults engaged in education and youth work. Benefits for teachers include greater development of capacities and potentialities, greater confidence in their abilities, and the ability to relate more effectively to others. Some of the specific training elements in an Outward Bound program are a close confrontation of man with nature, physical fitness, competition, solitude as an opportunity for introspection and reassessment, activities demanding self-discipline and attention to detail, and problem-solving and decision-making. Goals of the program are to instill values that affect attitudes and influence behavior. Pictures contained in this document have been deleted due to marginal reproducibility. (JH)

ED 031 528 MF - $0.25, HC - $1.45

A REPORT ON THE WORKSHOP FOR THE PREPARATION OF TENTATIVE OBJECTIVES AND GUIDELINES FOR RESIDENT OUTDOOR EDUCATION PROGRAMS FOR URBAN DISADVANTAGED YOUTH.
Vogl, Robert L., Illinois State Office of the Superintendent of Public Instruction, Springfield, 1967, 27p.

A workshop on outdoor education, funded by the Elementary and Secondary Education Act, Title V, was held to develop guidelines for a residential program for urban disadvantaged youth. Participants came from various educational and other disciplines. Resource speakers and leaders were also involved. Tentative guidelines and objectives were produced by three workshop groups, and recommendations of participants and of the steering committee are included in the document. (NH)

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ED 020 847
030 529

SUPPLEMENTARY EDUCATIONAL CENTERS

ED 028 862

SURVEYS

ED 021 683

SWIMMING POOLS

ED 019 844
027 709

TEACHER EDUCATION

ED 015 871

TEACHER GUIDANCE

ED 022 604

TEACHER WORKSHOPS

ED 031 339

TEACHING

ED 017 377

TEACHING GUIDES

ED 017 348
017 473
027 127
ED 027 221
027 983
028 086

TEACHING PROCEDURES

ED 016 606
020 850

TEENAGERS

ED 002 929
002 930

THEATER ARTS

ED 015 059

TEXTBOOKS

ED 020 136

UNEMPLOYED

ED 015 321

UNIT PLAN

ED 020 053

URBAN EDUCATION

ED 002 396

URBAN ENVIRONMENT

ED 023 495

WATER RESOURCES

ED 017 371
022 611
022 612

WORKSHOPS

ED 031 528

YOUTH PROGRAMS

ED 027 119

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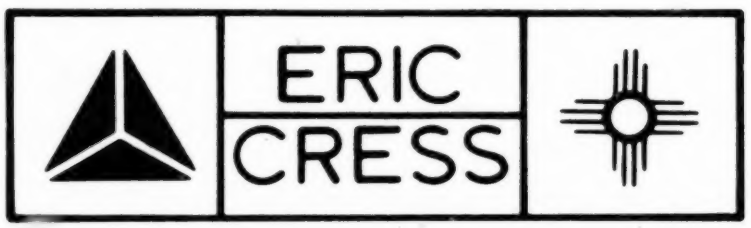
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